JCL/JCS Requirements and Examples

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

Note:
When running with the optional Recovery Aid (RLOG), all temporary data sets must also be cataloged in the job control.

This chapter covers the following topics:

- Collation with User Exit

- BS2000

- z/OS

- z/VSE

Collation with User Exit

If a collation user exit is to be used during ADALOD 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 CDX*nn*= *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	
Data Storage	DDDATARn	disk	
Work	DDWORKR1 DDWORKR4	disk	
Temp area	DDTEMPR1	disk	
Temp overflow (optional)	DDFILEA	disk/ tape	Stores descriptor values if the temp data set is too small
Sort area	DDSORTR1	disk	With large files, split the sort area across two volumes [1]
Sort area	DDSORTR2	disk	
Recovery log (RLOG)	DDRLOGR1	disk	Required when using the recovery log option
Compressed data	DDEBAND	disk/ tape	Output of ADACMP or ADAULD utility
ISNs to be deleted	DDISN	disk/ tape	ISNs to be deleted [2]
Deleted records	DDOLD	disk/ tape	Deleted records, if any [3]
ADARUN parameters	SYSDTA/ DDCARD		*Operations*
ADALOD parameters	SYSDTA/ DDKARTE		
ADARUN messages	SYSOUT/ DDPRINT		ADALOD report, see also *Messages and Codes*
ADALOD messages	SYSLST/ DDDRUCK		*Messages and Codes*

Notes:

1. Performance can be improved when sorting large files if the sort data set either occupies two volumes, or if two sort data sets are specified. Both data sets must be on the same device type (SORTDEV parameter), and each must be exactly half the size specified by the SORTSIZE parameter.
2. Four bytes per ISN, REC-FORM=VB, BUFF-LEN as in sequential file description, REC-SIZE maximum equals BUFF-LEN - 4. (In ISP format, REC-FORM is RECFM; BUFF-LEN is BLKSIZE; and REC-SIZE is LRECL.)
3. REC-FORM=VB, BUFF-LEN as in sequential file description, REC-SIZE maximum equals BUFF-LEN - 4. (In ISP format, REC-FORM is RECFM; BUFF-LEN is BLKSIZE; and REC-SIZE is LRECL.)

ADALOD JCL Example (BS2000)

Load File

In SDF Format:

```
/.ADALOD LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A L O D LOAD FILE
/REMARK *
/ASS-SYSLST L.LOD.LOAD
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAyyyyy.WORK,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=ADALOD,DB=yyyyy,IDTNAME=ADABAS5B
ADALOD LOAD FILE=1
ADALOD NAME= TESTFILE-1
ADALOD MAXISN=10000,DSSIZE=10
ADALOD TEMPSIZE=100,SORTSIZE=50
/LOGOFF SYS-OUTPUT=DEL
```

In ISP Format:

```
/.ADALOD LOGON
/OPTION MSG=FH,DUMP=YES
/REMARK *
/REMARK * A D A L O D LOAD FILE
/REMARK *
/SYSFILE SYSLST=L.LOD.LOAD
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyy.ASSO ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyy.DATA ,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAyyyyy.WORK ,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAyyyyy.TEMP ,LINK=DDTEMPR1
/FILE ADAyyyyy.SORT ,LINK=DDSORTR1
/FILE CMP.AUS,LINK=DDEBAND

/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADALOD,DB=yyyyy,IDTNAME=ADABAS5B
ADALOD LOAD FILE=1
ADALOD NAME= TESTFILE-1
ADALOD MAXISN=10000,DSSIZE=10
ADALOD TEMPSIZE=100,SORTSIZE=50
/LOGOFF NOSPOOL
```

Update

In SDF Format:

```
/.ADALOD LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A L O D LOAD FILE
/REMARK *
/DELETE-FILE LOD.ISN
```

```
/SET-JOB-STEP
/CREATE-FILE LOD.ISN,PUB(SPACE=(48,48))
/SET-JOB-STEP
/DELETE-FILE LOD.OLD
/SET-JOB-STEP
/CREATE-FILE LOD.OLD,PUB(SPACE=(480,48))
/SET-JOB-STEP
/ASS-SYSLST L.LOD.LOAD
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAyyyyy.WORK,SHARE-UPD=YES
/SET-FILE-LINK DDTEMPR1,ADAyyyyy.TEMP
/SET-FILE-LINK DDSORTR1,ADAyyyyy.SORT
/SET-FILE-LINK DDEBAND,CMP.AUS
/SET-FILE-LINK DDISN,LOD.ISN
/SET-FILE-LINK DDOLD,LOD.OLD
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADALOD,DB=yyyyy,IDTNAME=ADABAS5B
ADALOD UPDATE FILE=1,DDISN,SAVEDREC
ADALOD TEMPSIZE=100,SORTSIZE=50
ADALOD DELISN=100 199,230,301 399
/LOGOFF SYS-OUTPUT=DEL
```

In ISP Format:

```
/.ADALOD LOGON
/OPTION MSG=FH,DUMP=YES
/REMARK *
/REMARK * A D A L O D MASS UPDATE
/REMARK *
/SYSFILE SYSLST=L.LOD.UPDA
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyy.ASSO ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyy.DATA ,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAyyyyy.WORK ,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAyyyyy.TEMP ,LINK=DDTEMPR1
/FILE ADAyyyyy.SORT ,LINK=DDSORTR1
/FILE CMP.AUS,LINK=DDEBAND
/FILE LOD.ISN,LINK=DDISN ,SPACE=(48,48)
/FILE LOD.OLD,LINK=DDOLD ,SPACE=(480,48)
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADALOD,DB=yyyyy,IDTNAME=ADABAS5B
ADALOD UPDATE FILE=1,DDISN,SAVEDREC
ADALOD TEMPSIZE=100,SORTSIZE=50
ADALOD DELISN=100 199,230,301 399
/LOGOFF NOSPOOL
```

z/OS

Data Set	DD Name	Storage	More Information
Associator	DDASSORn	disk	
Data Storage	DDDATARn	disk	
Work	DDWORKR1 DDWORKR4	disk	Required only if Adabas nucleus is not active
Temp area	DDTEMPR1	disk	
Temp overflow (optional)	DDFILEA	disk/ tape	Stores descriptor values if the temp data set is too small
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	When using large files, split the sort area across two volumes [1]
Recovery log (RLOG)	DDRLOGR1	disk	Required for the recovery log option
Compressed data	DDEBAND	disk/ tape	Output of ADACMP or ADAULD utility
ISNs to be deleted	DDISN	disk/ tape	ISNs to be deleted [2]
Deleted records	DDOLD	disk/ tape	Deleted records, if any [3]
ADARUN parameters	DDCARD	reader	*Operations*
ADALOD parameters	DDKARTE	reader	
ADARUN messages	DDPRINT	printer	ADALOD report, see also *Messages and Codes*
ADALOD messages	DDDRUCK	printer	*Messages and Codes*

Notes:

1. Performance can be improved when sorting large files if the sort data set either occupies two volumes, or if two sort data sets are specified. When using two volumes, each volume must be exactly half the size specified by the SORTSIZE parameter. If two data sets are used, both must be on the same device type (SORTDEV parameter).
2. Four bytes per ISN, RECFM=VB, BLKSIZE as in sequential file description, LRECL maximum equals BLKSIZE - 4.
3. RECFM=VB, BLKSIZE as in sequential file description, LRECL maximum equals BLKSIZE - 4.

ADALOD JCL Examples (z/OS)

Refer also to ADALODE, ADALODA, ADALODM, and ADALODV in the JOBS data set for additional ADALOD examples on loading an ADAM file or the Adabas demo files.

Load File

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

```
//ADALOD    JOB
//*
//*    ADALOD: LOAD FILE
//*
//LOD       EXEC PGM=ADARUN
//STEPLIB   DD   DISP=SHR,DSN=ADABAS.ADAvrs.LOAD       <=== ADABAS LOAD
//*
//DDASSOR1  DD   DISP=SHR,DSN=EXAMPLE.DByyyyy.ASSOR1 <=== ASSO
//DDDATAR1  DD   DISP=SHR,DSN=EXAMPLE.DByyyyy.DATAR1 <=== DATA
//DDWORKR1  DD   DISP=SHR,DSN=EXAMPLE.DByyyyy.WORKR1 <=== WORK
//DDTEMPR1  DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.TEMPR1 <=== TEMP
//DDSORTR1  DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.SORTR1 <=== SORT
//DDEBAND   DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.DDEBAND <=== INPUT
//DDDRUCK   DD   SYSOUT=X
//DDPRINT   DD   SYSOUT=X
//SYSUDUMP  DD   SYSOUT=X
//DDCARD    DD   *
ADARUN PROG=ADALOD,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE   DD   *
ADALOD LOAD FILE=1
ADALOD NAME='TESTFILE-1'
ADALOD MAXISN=10000,DSSIZE=10
ADALOD TEMPSIZE=100,SORTSIZE=100
/*
```

Update

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

```
//ADALODMU  JOB
//*
//*      ADALOD: MASS UPDATE
//*
//LOD       EXEC PGM=ADARUN
//STEPLIB   DD   DISP=SHR,DSN=ADABAS.ADAvrs.LOAD                <=== ADABAS LOAD
//*
//DDASSOR1  DD   DISP=SHR,DSN=EXAMPLE.DByyyyy.ASSOR1          <=== ASSO
//DDDATAR1  DD   DISP=SHR,DSN=EXAMPLE.DByyyyy.DATAR1          <=== DATA
//DDTEMPR1  DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.TEMPR1          <=== TEMP
//DDSORTR1  DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.SORTR1          <=== SORT
//DDEBAND   DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.DDEBAND         <=== INPUT
//DDISN     DD   DISP=OLD,DSN=EXAMPLE.DByyyyy.DDISN           <=== ISNS TO DEL
//DDOLD     DD   DISP=(NEW,CATLG),DSN=EXAMPLE.DByyyyy.DDOLD, <=== DEL REC
//          SPACE=(TRK,(100,20),RLSE),UNIT=DISK,VOL=SER=VOLvvv
//DDDRUCK   DD   SYSOUT=X
//DDPRINT   DD   SYSOUT=X
//SYSUDUMP  DD   SYSOUT=X
//DDCARD    DD   *
ADARUN PROG=ADALOD,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
```

```
//DDKARTE   DD    *
ADALOD UPDATE FILE=1,LWP=400K,SAVEDREC
ADALOD TEMPSIZE=100,SORTSIZE=100
ADALOD DELISN=100-199,230,301-399
/*
```

z/VSE

Data Set	Symbolic	Storage	Logical Unit	More Information
Associator	ASSORn	disk		[1]
Data Storage	DATARn	disk		[1]
Work	WORKR1	disk	[1]	Required for inactive nucleus
Compressed data	EBAND	tape disk	SYS010 [1]	
Recovery log (RLOG)	RLOGR1	disk		Required for the recovery log option
Temp area	TEMPR1	disk	[1]	
Temp overflow (optional)	FILEA	tape disk	SYS012 [1]	Stores descriptor values if the temp data set is too small.
Sort area	SORTR1	disk		With large files, split sort area across two volumes [2]
ISNs to be deleted	ISN	tape disk	SYS016 [1]	ISNs to be deleted
Deleted records	OLD	tape disk	SYS014 [1]	Deleted ISNs
ADALOD messages	--	printer	SYS009	ADALOD report, see also *Messages and Codes*
ADARUN messages	--	printer	SYSLST	*Messages and Codes*
ADARUN parameters	-- CARD CARD	reader tape disk	SYSRDR SYS000 [1]	
ADALOD parameters	-	reader	SYSIPT	

Notes:

1. Any programmer logical unit may be used.
2. Performance can be improved when sorting large files if the sort data set occupies two volumes. When using two volumes, each volume must be exactly half the size specified by the SORTSIZE parameter. If two data sets are used, both must be on the same device type (SORTDEV parameter).

ADALOD JCS Examples (z/VSE)

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

Load File

Refer to member ADALOD.X for this example.

```
* $$ JOB JNM=ADALOD,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADALOD
*        SAMPLE FILE LOAD
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYSTEN,TAPE
// PAUSE MOUNT LOAD INPUT FILE ON TAPE cuu
// TLBL EBAND,'DEMO.FILE'
// MTC REW,SYS010
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADALOD,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADALOD LOAD FILE=1
ADALOD NAME='TESTFILE-1'
ADALOD MAXISN=10000,DSSIZE=10
ADALOD TEMPSIZE=100,SORTSIZE=100
/*
/&
* $$ EOJ
```

Update

Refer to member ADALODMU.X for this example.

```
* $$ JOB JNM=ADALODMU,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADALODMU
*        MASS UPDATE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS010,DISK,VOL=DISK01,SHR
// ASSGN SYS014,DISK,VOL=DISK02,SHR
// ASSGN SYS016,DISK,VOL=DISK03,SHR
// DLBL EBAND,'FILE.INPUT',,SD
// EXTENT SYS010,DISK01,1,0,sssss,nnnnn
// DLBL OLD,'FILE.OLD',,SD
// EXTENT SYS014,DISK02,1,0,sssss,nnnnn
// DLBL ISN,'FILE.ISN',,SD
// EXTENT SYS016,DISK03,1,0,sssss,nnnnn
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADALOD,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADALOD UPDATE FILE=1,LWP=400K,SAVEDREC
ADALOD TEMPSIZE=100,SORTSIZE=100
ADALOD DELISN=100-199,230,301-399
/*
/&
* $$ EOJ
```