

# JCL/JCS Requirements and Examples

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

This chapter covers the following topics:

- ASSO-, DATA-, and Work Data Sets
- Collation with User Exit
- Sorting Large Files
- BS2000
- z/OS
- z/VM
- VSE

## ASSO-, DATA-, and Work Data Sets

The ASSO, DATA, and Work data sets need not be specified if Adabas is run in multiuser mode (ADARUN MODE=MULTI), because they are not opened by ADAVAL. ADAVAL receives the information concerning the database by special Adabas commands when the database is active. However, if the database is not active, ADAVAL will have problems.

However, if Adabas is run in single user mode (ADARUN MODE=SINGLE), the ASSO, DATA, and Work data sets must be specified.

## Collation with User Exit

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

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

```
ADARUN CDXnn=exit-name
```

where

<i>nn</i>	is the number of the collation descriptor exit, a two-digit decimal integer in the range 01-08 inclusive.
<i>exit-name</i>	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.

## Sorting Large Files

When sorting large files, performance can be improved if either the sort data set occupies two volumes or 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.

### BS2000

Data Set	Link Name	Storage	More Information
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	Split the sort area across two volumes when using large files (see note)
Temp area	DDTEMPR1	disk	
ADARUN parameters	SYSDTA/DDCARD		<i>Operations</i>
ADAVAl parameters	SYSDTA/DDKARTE		
ADARUN messages	SYSOUT/DDPRINT		<i>Messages and Codes</i>
ADAVAl messages	SYSLST/DDDRUCK		<i>Messages and Codes</i>
Rejected data	DDFEHL	tape/disk	

### ADAVAl JCL Example (BS2000)

#### In SDF Format:

```

/.ADAVAl LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A V A L ALL FUNCTIONS
/REMARK *
/DELETE-FILE VAL.FEHL
/SET-JOB-STEP
/CREATE-FILE VAL.FEHL,PUB(SPACE=(48,48))
/SET-JOB-STEP
/ASS-SYSLST L.VAL
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDSORTR1,ADAvyyyy.SORT
/SET-FILE-LINK DDTEMPR1,ADAvyyyy.TEMP
/SET-FILE-LINK DDFEHL1,VAL.FEHL
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADAVAl,DB=yyyyy,IDTNAME=ADABAS5B
ADAVAl VALIDATE FILE=30,SORTSIZE=3,TEMPSIZE=5
/LOGOFF SYS-OUTPUT=DEL
    
```

**In ISP Format:**

```

/.ADAVAL LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A V A L ALL FUNCTIONS
/REMARK *
/SYSFILE SYSLST=L.VAL
/FILE ADAyyyyy.TEMP ,LINK=DDTEMPR1
/FILE ADAyyyyy.SORT ,LINK=DDSORTR1
/FILE ADA.MOD,LINK=DDLIB
/FILE VAL.FEHL,LINK=DDFEHL,SPACE=(48,48)
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADAVAL,DB=yyyyy, IDTNAME=ADABAS5B
ADAVAL VALIDATE FILE=30,SORTSIZE=3,TEMPSIZE=5
/LOGOFF NOSPOOL

```

**z/OS**

Data Set	DD Name	Storage	More Information
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	Split the sort area across two volumes when using large files (see note)
Temp area	DDTEMPR1	disk	
ADARUN parameters	DDCARD	reader	<i>Operations</i>
ADAVAL parameters	DDKARTE	reader	
ADARUN messages	DDPRINT	printer	<i>Messages and Codes</i>
ADAVAL messages	DDDRUCK	printer	<i>Messages and Codes</i>
Rejected data	DDFEHL	tape/disk	

**ADAVAL JCL Example (z/OS)**

```

//ADAVAL JOB
//*
//* ADAVAL: VALIDATE DATA BASE
//*
//VAL EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.ADAvrs.LOAD <=== ADABAS LOAD
//*
//DDSORTR1 DD DISP=OLD,DSN=EXAMPLE.DByyyyy.SORTR1 <=== SORT
//DDTEMPR1 DD DISP=OLD,DSN=EXAMPLE.DByyyyy.TEMPR1 <=== TEMP
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADAVAL,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*

```

```
//DDKARTE DD *
ADAVAL VALIDATE FILE=1,TEMPSIZE=ttt,SORTSIZE=sss
/*
```

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

## z/VM

Data Set	DD Name	Storage	More Information
Sort area	DDSORTR1	disk	
Sort area	DDSORTR2	disk	Split the sort area across two volumes when using large files (see note)
Temp area	DDTEMPR1	disk	
ADARUN parameters	DDCARD	disk/terminal/reader	<i>Operations</i>
ADAVAL parameters	DDKARTE	disk/terminal/reader	
ADARUN messages	DDPRINT	disk/ terminal/ printer	<i>Messages and Codes</i>
ADAVAL messages	DDDRUCK	disk/ terminal/ printer	
Rejected data	DDFEHL	tape/disk	

### Example (z/VM)

```
DATADEF DDPRINT,DSN=ADAVAL,DDPRINT,MODE=A
DATADEF DUMP,DUMMY
DATADEF DDDRUCK,DSN=ADAVAL.DDDRUCK,MODE=A
DATADEF DDTEMPR1,DSN=ADABASVv.TEMP,VOL=TEMPV1
DATADEF DDSORTR1,DSN=ADABASVv.SORT,VOL=SORTV1
DATADEF DDCARD,DSN=RUNVAL.CONTROL,MODE=A
DATADEF DDKARTE,DSN=ADAVAL.CONTROL,MODE=A
DATADEF DDFEHL,DSN=FILE030.VALERR,MODE=A
ADARUN
```

#### Contents of RUNVAL CONTROL A1:

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

#### Contents of ADAVAL CONTROL A1:

```
ADAVAL VALIDATE FILE=30,SORTSIZE=3,TEMPSIZE=5
```

## VSE

File	File Name	Storage	Logical Unit	More Information
Sort area	SORTR1	disk		
Sort area	SORTR2	disk		When using large files, split the sort area across two volumes (see note)
Temp area	TEMPR1	disk*		
ADARUN parameters	- CARD CARD	reader tape disk	SYSRDR SYS000 *	
ADAVAL parameters	-	reader	SYSIPT	<i>Utilities</i>
ADARUN messages	-	printer	SYSLST	<i>Messages and Codes</i>
ADAVAL messages	-	printer	SYS009	<i>Messages and Codes</i>
Rejected data	FEHL	tape disk	SYS014 *	

\* Any programmer logical unit can be used.

### ADAVAL JCS Example (VSE)

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

```
* $$ JOB JNM=ADAVAL , CLASS=A , DISP=D
* $$ LST CLASS=A , DISP=D
// JOB ADAVAL
*          VALIDATE DATABASE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// EXEC ADARUN , SIZE=ADARUN
ADARUN PROG=ADAVAL , MODE=SINGLE , SVC=xxx , DEVICE=dddd , DBID=yyyyy
/*
ADAVAL VALIDATE FILE=1 , TEMPSIZE=ttt , SORTSIZE=sss
/*
/&
* $$ EOJ
```

Refer to member ADAVAL.X for this example