

# JCL/JCS Requirements and Examples

This section describes the job control information required to run ADACMP with BS2000, OS/390 or z/OS, VM/ESA or z/VM, and VSE/ESA systems and shows examples of each of the job streams.

## Note:

When the recovery log is active, sequential datasets used by the utilities whose runs are logged on the RLOG must be kept and made available for any recovery operation; for example, the DD/EBAND input to an ADALOD LOAD operation.

This chapter covers the following topics:

- User Exits with ADACMP
  - BS2000
  - OS/390 or z/OS
  - VM/ESA or z/VM
  - VSE/ESA
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## User Exits with ADACMP

### Compression with User Exit

User exit 6 can be used to perform user processing on a record before it is processed by the ADACMP COMPRESS utility. See the *Adabas DBA Reference* documentation for more information.

If user exit 6 is to be used during ADACMP execution, the specified user exit routine must be loadable at execution time; that is, it must be assembled and linked into the Adabas

- load library (or any library concatenated with it) for BS2000, OS/390, VM/ESA.
- core image library or any library contained in the core image library search chain for VSE/ESA.

The ADACMP COMPRESS utility job must specify:

**ADARUN UEX6 = *exit-name***

where

<i>exit-name</i>	is the name of a user routine that gets control at the user exit; the name can be up to 8 characters long.
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## Collation with User Exit

If a collation user exit is to be used during ADACMP execution, the ADARUN CDX $nn$  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

<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.

## BS2000

Dataset	Link Name	Storage	More Information
User input data (COMPRESS function)	DDEBAND	tape/ disk	
Compressed data (DECOMPRESS function)	DDEBAND	tape/ disk	Not used if the parameter INFILE is used
Compressed data (COMPRESS function)	DDAUSBA	tape/ disk	
Decompressed data (DECOMPRESS function)	DDAUSBA	tape/ disk	
Rejected data	DDFEHL	tape/ disk	
ECS encoding objects	DDECSOJ	tape/ disk	Required for universal encoding support (UES)
ADARUN parameters	SYSDTA/ DDCARD		<i>Operations</i>
ADACMP parameters and data definitions	SYSDTA/ DDKARTE		<i>Utilities</i>
ADARUN messages	SYSOUT/ DDPRINT	printer/ disk	<i>Messages and Codes</i>
ADACMP report	SYSLST/ DDDRUCK	printer/ disk	<i>Messages and Codes</i>

## JCL Examples (BS2000)

### ADACMP COMPRESS

#### In SDF Format:

```

/ .ADACMP LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A C M P COMPRESS
/REMARK *
/DELETE-FILE CMP.AUS
/SET-JOB-STEP
/DELETE-FILE CMP.FEHL
/SET-JOB-STEP
/CREATE-FILE CMP.AUS,PUB( SPACE=( 48, 48 )
/SET-JOB-STEP
/CREATE-FILE CMP.FEHL,PUB( SPACE=( 48, 48 ) )
/SET-JOB-STEP

/ASS-SYSLST L.CMP
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDEBAND,CMP.EIN
/SET-FILE-LINK DDAUSBA,CMP.AUS
/SET-FILE-LINK DDFEHL,CMP.FEHL

```

```

/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADACMP,DB=yyyyyy,IDTNAME=ADABAS5B
ADACMP COMPRESS NUMREC=1000,FDT=1,USERISN,DEVICE=dddd,eeee
/LOGOFF SYS-OUTPUT=DEL

```

**In ISP Format:**

```

/.ADACMP LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A C M P COMPRESS
/REMARK *
/ER CMP.AUS
/STEP
/ER CMP.FEHL
/STEP
/SYSFILE SYSLST=L.CMP
/FILE ADA.MOD,LINK=DDLIB
/FILE CMP.EIN,LINK=DDEBAND
/FILE CMP.AUS,LINK=DDAUSBA,SPACE=(48,48)
/FILE CMP.FEHL,LINK=DDFEHL,SPACE=(48,48)
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADACMP,DB=yyyyyy,IDTNAME=ADABAS5B
ADACMP COMPRESS NUMREC=1000,FDT=1,USERISN,DEVICE=dddd,eeee
/LOGOFF NOSPOOL

```

**ADACMP DECOMPRESS****In SDF Format:**

```

/.ADACMP LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A C M P DECOMPRESS
/REMARK *

/DELETE-FILE CMP.AUS
/SET-JOB-STEP
/DELETE-FILE CMP.FEHL
/SET-JOB-STEP
/CREATE-FILE CMP.AUS,PUB(SPACE=(48,48))
/SET-JOB-STEP
/CREATE-FILE CMP.FEHL,PUB(SPACE=(48,48))
/SET-JOB-STEP
/ASS-SYSLST L.DEC
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDEBAND,CMP.EIN
/SET-FILE-LINK DDAUSBA,CMP.AUS
/SET-FILE-LINK DDFEHL,CMP.FEHL
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADACMP,DB=yyyyyy,IDTNAME=ADABAS5B
ADACMP DECOMPRESS
/LOGOFF SYS-OUTPUT=DEL

```

**In ISP Format:**

```

/.ADACMP LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A C M P DECOMPRESS
/REMARK *

```

```

/ER CMP.AUS
/STEP
/ER CMP.FEHL
/STEP
/SYSFILE SYSLST=L.CMP.DEC

/FILE ADA.MOD,LINK=DDLIB
/FILE CMP.EIN,LINK=DDEBAND
/FILE CMP.AUS,LINK=DDAUSBA,SPACE=(48,48)
/FILE CMP.FEHL,LINK=DDFEHL,SPACE=(48,48)
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADACMP,DB=yyyyy,IDTNAME=ADABAS5B
ADACMP DECOMPRESS
/LOGOFF NOSPOOL

```

## OS/390 or z/OS

Dataset	DD Name	Storage	More Information
User input data (COMPRESS function)	DDEBAND	tape/ disk	
Compressed data (DECOMPRESS function)	DDEBAND	tape/ disk	Not used if the parameter INFILE is specified
Compressed data (COMPRESS function)	DDAUSBA	tape/ disk	
Decompressed data (DECOMPRESS function)	DDAUSBA	tape/ disk	
Rejected data	DDFEHL	tape/ disk	
ECS encoding objects	DDECSOJ	tape/ disk	Required for universal encoding support (UES)
ADACMP report	DDDRUCK	printer	
ADARUN messages	DDPRINT	printer	
ADARUN parameters	DDCARD	reader	
ADACMP parameters and data definitions	DDKARTE	reader	

### JCL Examples (OS/390 or z/OS)

In the MVSJOBS dataset, refer to ADACMP for the COMPRESS example and ADACMPD for the DECOMPRESS example.

**ADACMP COMPRESS**

```
//ADACMP      JOB
//*
//*          ADACMP COMPRESS
//*          COMPRESS A FILE
//*
//CMP          EXEC PGM=ADARUN
//STEPLIB     DD   DISP=SHR,DSN=ADABAS.Vvrs.LOAD          <=== ADABAS LOAD
//*

//DDDRUCK     DD   SYSOUT=X
//DDPRINT     DD   SYSOUT=X
//SYSUDUMP    DD   SYSOUT=X
//DDEBAND     DD   DISP=OLD,DSN=EXAMPLE.DByyyyyy.INPUT,UNIT=TAPE, <===
//              VOL=SER=TAPE01                               <===
//DDAUSBA     DD   DISP=(NEW,KEEP),DSN=EXAMPLE.DByyyyyy.COMP01,UNIT=DISK, <==
//              VOL=SER=DISK01,SPACE=(TRK,(200,10),RLSE)
//DDFEHL      DD   DISP=(NEW,KEEP),DSN=EXAMPLE.DByyyyyy.FEHL,UNIT=DISK, <===
//              VOL=SER=DISK01,SPACE=(TRK,1)
//DDCARD      DD   *
ADARUN PROG=ADACMP,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE     DD   *
ADACMP COMPRESS FILE=1
ADACMP FNDEF='01,AA,008,B,DE'
ADACMP FNDEF='01,BA,020,A,NU,DE'
ADACMP FNDEF='01,BB,015,A,NU,DE'
ADACMP FNDEF='01,BC,001,A,FI'
ADACMP FNDEF='01,CA,001,A,NU,DE'
ADACMP FNDEF='01,CB,002,U,NU,DE'
ADACMP FNDEF='01,CC,010,A,NU,DE'
ADACMP FNDEF='01,CD,002,U,NU,DE'
ADACMP FNDEF='01,DA,005,U,NU'
ADACMP FNDEF='01,DB,020,A,NU,DE'
ADACMP FNDEF='01,DC,015,A,NU,DE'
ADACMP FNDEF='01,DD,002,A,NU,DE'
ADACMP FNDEF='01,DE,005,U,NU,DE'
ADACMP FNDEF='01,DF,008,A,NU,DE'
ADACMP FNDEF='01,FA,020,A,NU,DE'
ADACMP FNDEF='01,FB,006,U,NU,DE'
ADACMP FNDEF='01,FC,006,U,NU'
ADACMP FNDEF='01,GA,002,U,NU'
ADACMP FNDEF='01,HA,002,U,NU'
ADACMP FNDEF='01,IA,002,U,NU'

ADACMP FNDEF='01,KA,002,U,NU'
ADACMP FNDEF='01,LA,030,A,NU,DE'
ADACMP SUBDE='SB=DE(3,5)'
ADACMP SUPDE='SP=CA(1,1),CB(1,2),CD(1,2)'
ADACMP PHONDE='PA(BA)'
/*
```

**ADACMP DECOMPRESS**

```
//ADACMP      JOB
//*
//*          ADACMP COMPRESS
//*          DECOMPRESS A FILE
//*
//DECMP        EXEC PGM=ADARUN
//STEPLIB     DD   DISP=SHR,DSN=ADABAS.Vvrs.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
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDEBAND DD DISP=OLD,DSN=EXAMPLE.DByyyyyy.COMP01,UNIT=TAPE,
// VOL=SER=TAPE01
//DDAUSBA DD DISP=(NEW,KEEP),DSN=EXAMPLE.DByyyyyy.DECOMP01,UNIT=DISK,
// VOL=SER=DISK01,SPACE=(TRK,(200,10),RLSE)
//DDFEHL DD DISP=(NEW,KEEP),DSN=EXAMPLE.DByyyyyy.FEHL,UNIT=DISK,
// VOL=SER=DISK01,SPACE=(TRK,1)
//DDCARD DD *
ADARUN PROG=ADACMP,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyyy
/*
//DDKARTE DD *
ADACMP DECOMPRESS INFILE=1
/*

```

## VM/ESA or z/VM

Dataset	DD Name	Storage	More Information
User input data (COMPRESS function)	DDEBAND	tape/ disk	
Compressed data (DECOMPRESS function)	DDEBAND	tape/ disk	Not used if the parameter INFILE is specified
Compressed data (COMPRESS function)	DDAUSBA	tape/ disk	
Decompressed data (DECOMPRESS function)	DDAUSBA	tape/ disk	
Rejected data	DDFEHL	tape/ disk	
ECS encoding objects	DDECSOJ	tape/ disk	Required for universal encoding support
ADACMP report	DDDRUCK	disk/ terminal/ printer	
ADARUN messages	DDPRINT	disk/ terminal/ printer	
ADARUN parameters	DDCARD	disk/ terminal/ reader	
ADACMP control cards and data definitions	DDKARTE	disk/ terminal/ reader	

## JCL Example (VM/ESA or z/VM)

### ADACMP COMPRESS

```
DATADEF DDEBAND,DSN=FILE015.CMPD015,MODE=A
DATADEF DDAUSBA,DSN=FILE015.LODD015,MODE=A
DATADEF DDFEHL,DSN=FILE015.CMPERROR,MODE=A
DATADEF DDDRUCK,DSN=ADACMP.DDDRUCK,MODE=A
DATADEF DDPRINT,DSN=ADACMP.DDPRINT,MODE=A
DATADEF DUMP,DUMMY
DATADEF DDCARD,DSN=RUNCMP.CONTROL,MODE=A
DATADEF DDKARTE,DSN=FILE001.CMPC015,MODE=A
ADARUN
```

### Contents of RUNCMP CONTROL A1:

```
ADARUN PROG=ADACMP,DEVICE=dddd,DB=yyyyyy
```

### Contents of FILE001 CMPC015 A1:

```
ADACMP COMPRESS
NUMREC=1000,FDT=1,USERISN,DEVICE=dddd,eeee
```

## VSE/ESA



File	File Name	Storage	Logical Unit	More Information
User input data (COMPRESS function)	EBAND	tape disk	SYS010 *	
Compressed data (DECOMPRESS function)	EBAND	tape disk	SYS010 *	Not used if parameter INFILE is specified
Compressed data (COMPRESS function)	AUSBA	tape disk	SYS012 *	
Decompressed data (DECOMPRESS function)	AUSBA	tape disk	SYS012 *	
Rejected data	FEHL	tape disk	SYS017 *	
ECS encoding objects	ECISOJ	tape disk	SYS020 *	Required for universal encoding support
ADACMP report	-	printer	SYS009	
ADARUN messages	-	printer	SYSLST	
ADARUN parameters	- CARD CARD	reader tape disk	SYSRDR SYS000 *	
ADACMP control cards and data definitions	-	reader	SYSIPT	

\* Any programmer logical unit may be used.

## JCS Examples (VSE/ESA)

See Procedures for VSE/ESA Examples for descriptions of the VSE procedures.

Refer to member ADACMP.X for the COMPRESS example and member ADACMPD.X for the DECOMPRESS example.

### ADACMP COMPRESS

```
* $$ JOB JNM=ADACMP,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
*      COMPRESS A FILE
// JOB ADACMP
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS010,TAPE
```

```

// PAUSE MOUNT LOAD INPUT FILE ON TAPE cuu
// TLBL EBAND,'EXAMPLE.DByyyyy.UNCOMP01'
// MTC REW,SYS010
// DLBL AUSBA,'EXAMPLE.DByyyyy.COMP01',,SD
// EXTENT SYS016,,,,sssss,nnnnn
// ASSGN SYS016,DISK,VOL=DISK01,SHR
// DLBL FEHL,'EXAMPLE.DByyy.FEHL',,SD
// EXTENT SYS017,,,,sssss,nnnnn
// ASSGN SYS017,DISK,VOL=DISK02,SHR
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADACMP,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADACMP COMPRESS FILE=1
ADACMP FNDEF='01,AA,008,B,DE'
ADACMP FNDEF='01,BA,020,A,NU,DE'
ADACMP FNDEF='01,BB,015,A,NU,DE'
ADACMP FNDEF='01,BC,001,A,FI'
ADACMP FNDEF='01,CA,001,A,NU,DE'
ADACMP FNDEF='01,CB,002,U,NU,DE'
ADACMP FNDEF='01,CC,010,A,NU,DE'
ADACMP FNDEF='01,CD,002,U,NU,DE'
ADACMP FNDEF='01,DA,005,U,NU'
ADACMP FNDEF='01,DB,020,A,NU,DE'
ADACMP FNDEF='01,DC,015,A,NU,DE'
ADACMP FNDEF='01,DD,002,A,NU,DE'
ADACMP FNDEF='01,DE,005,U,NU,DE'
ADACMP FNDEF='01,DF,008,A,NU,DE'
ADACMP FNDEF='01,FA,020,A,NU,DE'
ADACMP FNDEF='01,FB,006,U,NU,DE'
ADACMP FNDEF='01,FC,006,U,NU'

ADACMP FNDEF='01,GA,002,U,NU'
ADACMP FNDEF='01,HA,002,U,NU'
ADACMP FNDEF='01,IA,002,U,NU'
ADACMP FNDEF='01,KA,002,U,NU'
ADACMP FNDEF='01,LA,030,A,NU,DE'
ADACMP SUBDE='SB=DE(3,5)'
ADACMP SUPDE='SP=CA(1,1),CB(1,2),CD(1,2)'
ADACMP PHONDE='PA(BA)'
/*
/&
* $$ EOJ

```

## ADACMP DECOMPRESS

```

* $$ JOB JNM=ADACMPD,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
*      DECOMPRESS A FILE
// JOB ADACMPD
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS010,TAPE
// PAUSE MOUNT LOAD INPUT FILE ON TAPE cuu
// TLBL EBAND,'EXAMPLE.DByyyyy.COMP01'
// MTC REW,SYS010
// DLBL AUSBA,'EXAMPLE.DByyyyy.DECOMP01',,SD
// EXTENT SYS016,,,,sssss,nnnnn
// ASSGN SYS016,DISK,VOL=DISK01,SHR
// DLBL FEHL,'EXAMPLE.DByyy.FEHL',,SD
// EXTENT SYS017,,,,sssss,nnnnn
// ASSGN SYS017,DISK,VOL=DISK02,SHR
*

```

```
* *****  
*      REMEMBER TO CUSTOMIZE PARAMETERS OF ADABAS UTILITY  
* *****  
// EXEC ADARUN,SIZE=ADARUN  
ADARUN PROG=ADACMP,MODE=MULTI,SVC=xxx,DEVICE=dddd,DBID=yyyyy  
/*  
ADACMP DECOMPRESS INFILE=1  
/*  
/&  
* $$ EOJ
```