

# JCL/JCS Requirements and Examples

This section describes the job control information required to run ADASAV 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.

This chapter covers the following topics:

- BS2000
  - OS/390 or z/OS
  - VM/ESA or z/VM
  - VSE/ESA
- 

## BS2000

Dataset	Link Name	Storage	More Information
Associator	DDASSORn	disk	
Data Storage	DDDATARn	disk	
Work	DDWORKR1 DDWORKR4	disk	Required if Adabas nucleus is not active
Multiple protection log	DDPLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Multiple command log	DDCLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Recovery log (RLOG)	DDRLOGR1	disk	Required for ADARAI
Backup copy	DDSAVE1-8	tape/ disk	Required for SAVE
Dual copy	DDDUAL1-8	tape/ disk	Required for SAVE with two backup copies
Backup copy (input to the RESTORE function)	DDREST1-8	tape/ disk	Required for RESTORE and RESTONL
Sequential protection log	DDPLOG	tape/ disk	Required for RESTONL and RESTPLOG
ADARUN parameters	SYSDTA/ DDCARD		<i>Operations</i>
ADASAV parameters	SYSDTA/ DDKARTE		
ADARUN messages	SYSOUT/ DDPRINT		<i>Messages and Codes</i>
ADASAV messages	SYSLST/ DDDRUCK		<i>Messages and Codes</i>

**Note:**

For RESTONL, the input SAVE tapes and the sequential protection log can be concatenated, using the name DDREST1.

**ADASAV JCL Examples (BS2000)****Save Files, Save Database****In SDF Format:**

```

/ .ADASAV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A S A V SAVE FILES, SAVE DATABASE
/REMARK *

```

```

/DELETE-FILE ADAYyyyyy.SAVE1
/SET-JOB-STEP
/CREATE-FILE ADAYyyyyy.SAVE1,SUP=TAPE(DEVICE=TAPE-C1,VOL=SAV101),-
/  PROT=(USER-ACCESS=ALL-USERS)
/SET-JOB-STEP
/DELETE-FILE ADAYyyyyy.DUAL1
/SET-JOB-STEP
/CREATE-FILE ADAYyyyyy.DUAL1,SUP=TAPE(DEVICE=TAPE-C1,VOL=SAV101),-
/  PROT=(USER-ACCESS=ALL-USERS)
/SET-JOB-STEP
/ASS-SYSLST L.SAV.SAVE
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAYyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAYyyyyy.WORK,SHARE-UPD=YES
/SET-FILE-LINK DDSSAVE1,ADAYyyyyy.SAVE1,TAPE(FILE-SEQ=1)
/SET-FILE-LINK DDSUAL1,ADAYyyyyy.DUAL1,TAPE(FILE-SEQ=1)
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADASAV,DB=yyyyyy,IDTNAME=ADABAS5B
ADASAV SAVE TWOCOPIES
/LOGOFF SYS-OUTPUT=DEL

```

## Save Files, Save Database (Continued)

### In ISP Format:

```

/.ADASAV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A S A V SAVE FILES, SAVE DATABASE
/REMARK *

/SYSFILE SYSLST=L.SAV.SAVE
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAYyyyyy.ASSO,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAYyyyyy.DATA,LINK=DDATAR1,SHARUPD=YES
/FILE ADAYyyyyy.WORK,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAYyyyyy.SAVE1,LINK=DDSAVE1,DEVICE=TAPE-C1,VOLUME=SAV101
/FILE ADAYyyyyy.DUAL1,LINK=DDUAL1,DEVICE=TAPE-C1,VOLUME=SAV201
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy,IDTNAME=ADABAS5B
ADASAV SAVE TWOCOPIES
/LOGOFF NOSPOOL

```

## Restore Files from SAVE Datasets Created Online

### In SDF Format:

```

/.ADASAV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE FILES, RESTORE DATABASE
/REMARK * FROM ONLINE CREATED SAVE DATASETS
/REMARK *
/ASS-SYSLST L.SAV.REON
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAYyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAYyyyyy.WORK,SHARE-UPD=YES
/SET-FILE-LINK DDPLOGR1,ADAYyyyyy.PLOGR1,SHARE-UPD=YES

```

```

/SET-FILE-LINK DDPLOGR2,ADAYyyyyy.PLOGR2,SHARE-UPD=YES
/SET-FILE-LINK DDREST1,ADAYyyyyy.SAVE1
/SET-FILE-LINK DDPLOG,ADAYyyyyy.PLOG
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADASAV,DB=yyyyyy,IDTNAME=ADABAS5B
ADASAV RESTONL FILES=2,PLOGNUM=ppp,SYN1=43
/LOGOFF SYS-OUTPUT=DEL

```

## Restore Files from SAVE Datasets Created Online (Continued)

### In ISP Format:

```

/.ADASAV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE FILES, RESTORE DATABASE
/REMARK * FROM ONLINE CREATED SAVE DATASETS
/REMARK *

/SYSFILE SYSLST=L.SAV.REON
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAYyyyyy.ASSO,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAYyyyyy.DATA,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAYyyyyy.WORK,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAYyyyyy.SAVE1,LINK=DDREST1
/FILE ADAYyyyyy.PLOG,LINK=DDPLOG
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy,IDTNAME=ADABAS5B
ADASAV RESTONL FILES=2,PLOGNUM=ppp,SYN1=43
/LOGOFF NOSPOOL

```

## Restore Database

### In SDF Format:

```

/.ADASAV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * ADASAV:
/REMARK * EXAMPLE HOW TO USE ADASAV TO RESTORE THE
/REMARK * ENTIRE DATABASE /REMARK *
/REMARK *
/DELETE-FILE ADAYyyyyy.SAVE1
/SET-JOB-STEP
/IMPORT-FILE
SUP=TAPE(F-NAME=ADAYyyyyy.SAVE1,DEV-TYPE=TAPE-C1,VOL=SAV101)
/SET-JOB-STEP
/ASS-SYSLST L.SAV.REST
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAYyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAYyyyyy.WORK,SHARE-UPD=YES
/SET-FILE-LINK DDPLOGR1,ADAYyyyyy.PLOGR1,SHARE-UPD=YES
/SET-FILE-LINK DDPLOGR2,ADAYyyyyy.PLOGR2,SHARE-UPD=YES
/SET-FILE-LINK DDREST1,ADAYyyyyy.SAVE1,TAPE(FILE-SEQ=1),ACC-METH=SAM,-
/ BUFF-LEN=32768,REC-FORM=V
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADASAV,DB=yyyyyy,IDTNAME=ADABAS5B
ADASAV RESTORE OVERWRITE
/LOGOFF SYS-OUTPUT=DEL

```

**Restore Database (Continued)****In ISP Format:**

```

/.ADASAV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * ADASAV:
/REMARK * EXAMPLE HOW TO USE ADASAV TO RESTORE THE
/REMARK * ENTIRE DATABASE
/REMARK *
/SYSFILE SYSLST=L.SAV.REST
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyyy.ASSO ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyyy.DATA ,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAyyyyyy.WORK ,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAyyyyyy.SAVE1 ,LINK=DDREST1,DEVICE=TAPE-C1,VOLUME=ADA001,-
/ STATE=FOREIGN.-
/ FCBTYPE=SAM,RECFORM=V,RECSIZE=,BLKSIZE=32768,LABEL=STD
/FILE ADAyyyyyy.PLOGR1,LINK=DDPLOGR1,SHARUPD=YES
/FILE ADAyyyyyy.PLOGR2,LINK=DDPLOGR2,SHARUPD=YES
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTORE OVERWRITE
/LOGOFF NOSPOOL

```

**Restore Protection Log after an Interrupted RESTONL Function****In SDF Format:**

```

/.ADASAV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE PROTECTION LOG
/REMARK *
/ASS-SYSLST L.SAV.REPL
/ASS-SYSDTA *SYSCMD
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK DDASSOR1,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAYyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDWORKR1,ADAYyyyyy.WORK,SHARE-UPD=YES
/SET-FILE-LINK DDPLOG,ADAYyyyyy.PLOG
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTPLOG FILES=2,PLOGNUM=ppp,SYN1=43
/LOGOFF SYS-OUTPUT=DEL

```

**In ISP Format:**

```

/.ADASAV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE PROTECTION LOG
/REMARK *
/SYSFILE SYSLST=L.SAV.REPL
/FILE ADA.MOD,LINK=DDLIB
/FILE ADAyyyyyy.ASSO ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyyy.DATA ,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAyyyyyy.WORK ,LINK=DDWORKR1,SHARUPD=YES
/FILE ADAyyyyyy.PLOG ,LINK=DDPLOG

```

```

/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTPLOG FILES=2,PLOGNUM=ppp, SYN1=43
/LOGOFF NOSPOOL

```

## Restore Files from SAVE Datasets Created Offline

### In SDF Format:

```

/.ADASAV LOGON
/MODIFY-TEST-OPTIONS DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE FILES, RESTORE DATABASE
/REMARK * FROM OFFLINE CREATED SAVE DATASETS
/REMARK *
/ASS-SYSLST L.SAV.REFM
/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 DDREST1,ADAYyyyy.SAVE1
/START-PROGRAM *M(ADA.MOD,ADARUN),PR-MO=ANY
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTORE FMOVE=2
/LOGOFF SYS-OUTPUT=DEL

```

### In ISP Format:

```

/.ADASAV LOGON
/OPTION MSG=FB,DUMP=YES
/REMARK *
/REMARK * A D A S A V RESTORE FILES, RESTORE DATABASE
/REMARK * FROM OFFLINE CREATED SAVE DATASETS
/REMARK *
/SYSFILE SYSLST=L.SAV.REFM
/FILE ADA.MOD, LINK=DDLIB
/FILE ADAYyyyy.ASSO, LINK=DDASSOR1, SHARUPD=YES
/FILE ADAYyyyy.DATA, LINK=DDATAR1, SHARUPD=YES
/FILE ADAYyyyy.WORK, LINK=DDWORKR1, SHARUPD=YES
/FILE ADAYyyyy.SAVE1, LINK=DDREST1
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTORE FMOVE=2
/LOGOFF NOSPOOL

```

## OS/390 or z/OS

Dataset	DD Name	Storage	More Information
Associator	DDASSORn	disk	
Data Storage	DDDATARn	disk	
Work	DDWORKR1 DDWORKR4	disk	Required if Adabas nucleus is not active
Multiple protection log	DDPLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Multiple command log	DDCLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Recovery log (RLOG)	DDRLOGR1	disk	Required for ADARAI
Backup copy	DDSAVE1-8	tape/ disk	Required for SAVE
Dual copy	DDDUAL1-8	tape/ disk	Required for SAVE with two backup copies
Backup copy (input for RESTORE function)	DDREST1-8	tape/ disk	Required for RESTORE and RESTONL
Sequential protection log	DDPLOG	tape/ disk	Required for RESTONL and RESTPLOG
ADARUN parameters	DDCARD	reader	<i>Operations</i>
ADASAV parameters	DDKARTE	reader	
ADARUN messages	DDPRINT	printer	<i>Messages and Codes</i>
ADASAV messages	DDDRUCK	printer	<i>Messages and Codes</i>

**Note:**

For RESTONL, the input SAVE tapes and the sequential protection log can be concatenated, using the name DDREST1.

**ADASAV JCL Examples (OS/390 or z/OS)****Save Database**

```
//ADASAV    JOB
//*
//*    ADASAV:
//*    EXAMPLE HOW TO USE ADASAV TO SAVE THE
//*    ENTIRE DATABASE
//*
//SAVE      EXEC PGM=ADARUN
```

```
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.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
//DDSAVE1 DD DSN=EXAMPLE.DByyyyy.DDSAVE1,UNIT=TAPE, <=== OUTPUT
//
//          DISP=(,CATLG),VOL=SER=ADABCK
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV SAVE
/*
```

Refer to ADASAV in the MVSJOBS dataset for this example.

### Save Database with Two Copies of Output

```
//ADASAVT JOB
/*
/* ADASAV:
/* EXAMPLE HOW TO USE ADASAV TO SAVE THE
/* ENTIRE DATABASE CREATING TWO COPIES OF THE OUTPUT
/*
//SAVE EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.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
//DDSAVE1 DD DSN=EXAMPLE.DByyyyy.DDSAVE1,UNIT=TAPE, <=== OUTPUT
//
//          DISP=(,CATLG),VOL=SER=ADABCK
//DDDUAL1 DD DSN=EXAMPLE.DByyyyy.DDSAVD1,UNIT=TAPE, <=== OUTPUT
//
//          DISP=(,CATLG),VOL=SER=ADABCK1
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV SAVE TWOCOPIES
/*
```

Refer to ADASAVT in the MVSJOBS dataset for this example.

### Restore Database

```
//ADASAVR JOB
/*
/* ADASAV:
/* EXAMPLE HOW TO USE ADASAV TO RESTORE THE
/* ENTIRE DATABASE
/*
//RESTORE EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.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
//DDPLOGR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR1 <=== PLOG1
//DDPLOGR2 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR2 <=== PLOG2
//DDREST1 DD DSN=EXAMPLE.DByyyyy.SAVE, <=== SAVE OUTPUT
// DISP=OLD,UNIT=TAPE,VOL=SER=ADABCK
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X

//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV RESTORE OVERWRITE
/*
```

Refer to ADASAVR in the MVSJOBS dataset for this example.

### Restore Files From SAVE Datasets Created Offline

```
//ADASAVRF JOB
/*
/* ADASAV:
/* EXAMPLE HOW TO USE ADASAV TO RESTORE A FILE
/* TO ANY RABNS FROM AN OFFLINE SAVE
/*
//RESTORE EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.LOAD <=== ADABASLOAD
/*
//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
//DDPLOGR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR1 <=== PLOG1
//DDPLOGR2 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR2 <=== PLOG2
//DDREST1 DD DSN=EXAMPLE.DByyyyy.SAVE, <=== SAVE OUTPUT
// DISP=OLD,UNIT=TAPE,VOL=SER=ADABCK
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV RESTORE FMOVE=2
/*
```

Refer to ADASAVRF in the MVSJOBS dataset for this example.

### Restore Files From SAVE Datasets Created Online

```
//ADASAVRO JOB
/*
/* ADASAV:
/* EXAMPLE HOW TO USE ADASAV TO RESTORE FILES
/* FROM SAVE DATA SETS CREATED ONLINE
/*
//RESTORE EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.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
//DDPLOGR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR1 <=== PLOG1
//DDPLOGR2 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR2 <=== PLOG2
//DDREST1 DD DSN=EXAMPLE.DByyyyy.SAVE, <=== SAVE OUTPUT
// DISP=OLD,UNIT=TAPE,VOL=SER=ADABCK
//DDPLOG DD DSN=EXAMPLE.DByyyyy.PLOG, <=== PLOG OUTPUT
// DISP=OLD,UNIT=TAPE,VOL=SER=PLOGD1
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV RESTONL FILES=2,PLOGNUM=ppp,SYN1=1
/*
```

Refer to ADASAVRO in the MVSJOBS dataset for this example.

### Restore Protection Log after an Interrupted RESTONL Function

```
//ADASAVRP JOB
/*
/* ADASAV:
/* EXAMPLE HOW TO USE ADASAV TO RESTORE THE
/* PROTECTION LOG AFTER AN INTERRUPTED RESTONL
/*
//RESTORE EXEC PGM=ADARUN
//STEPLIB DD DISP=SHR,DSN=ADABAS.Vvrs.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
//DDPLOGR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR1 <=== PLOG1
//DDPLOGR2 DD DISP=SHR,DSN=EXAMPLE.DByyyyy.PLOGR2 <=== PLOG2
//DDPLOG DD DSN=EXAMPLE.DByyyyy.PLOG, <=== PLOG INPUT
// DISP=OLD,UNIT=TAPE,VOL=SER=PLOGD1
//DDDRUCK DD SYSOUT=X
//DDPRINT DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//DDCARD DD *
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
//DDKARTE DD *
ADASAV RESTPLOG PLOGNUM=ppp,SYN1=1
/*
```

Refer to ADASAVRP in the MVSJOBS dataset for this example.

## VM/ESA or z/VM

Dataset	DD Name	Storage	More Information
Associator	DDASSORn	disk	
Data Storage	DDDATARn	disk	
Work	DDWORKR1 DDWORKR4	disk	Required if Adabas nucleus not active
Multiple protection log	DDPLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Multiple command log	DDCLOGRn	disk	Optional for RESTORE and RESTONL database/GCB
Recovery log (RLOG)	DDRLOGR1	disk	Required for ADARAI
Backup copy	DDSAVE1-8	tape/ disk	Required for SAVE
Dual copy	DDDUAL1-8	tape/ disk	Required for SAVE with two backup copies
Backup copy (input to RESTORE function)	DDREST1-8	tape/ disk	Required for RESTORE and RESTONL
Sequential protection log	DDPLOG	tape/ disk	Required for RESTONL and RESTPLOG
ADARUN parameters	DDCARD	disk/ terminal/ reader	<i>Operations</i>
ADASAV parameters	DDKARTE	disk/ terminal/ reader	
ADARUN messages	DDPRINT	disk/ terminal/ printer	<i>Messages and Codes</i>
ADASAV messages	DDDRUCK	disk/ terminal/ printer	<i>Messages and Codes</i>

**Note:**

For RESTONL, the input SAVE tapes and the sequential protection log can be concatenated, using the name DDREST1.

**ADASAV Job Control Examples (VM/ESA or z/VM)****Save Database**

```

DATADEF DDASSOR1 , DSN=ADABASVv . ASSO , VOL=ASSOV1
DATADEF DDDATAR1 , DSN=ADABASVv . DATA , VOL=DATAV1
DATADEF DDWORKR1 , DSN=ADABASVv . WORK , VOL=WORKV1
DATADEF DDSAVE1 , DSN=ADABASVv . COPY1 , MODE=A
DATADEF DDDUAL1 , DSN=ADABASVv . COPY2 , MODE=A
DATADEF DDPRINT , DSN=ADASAV . DDPRINT , MODE=A
DATADEF DUMP , DUMMY

```

```

DATADEF  DDDRUCK , DSN=ADASAV . DDDRUCK , MODE=A
DATADEF  DDCARD , DSN=RUNSAV . CONTROL , MODE=A
DATADEF  DDKARTE , DSN=ADASAV . CONTROL , MODE=A
ADARUN

```

### *Contents of RUNSAV CONTROL AI*

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

### *Contents of ADASAV CONTROL AI*

```
ADASAV  SAVE  TWOCOPIES
```

## **Restore Files from SAVE Datasets Created Online**

```

DATADEF  DDASSOR1 , DSN=ADABASVv . ASSO , VOL=ASSOV1
DATADEF  DDDATAR1 , DSN=ADABASVv . DATA , VOL=DATAV1
DATADEF  DDWORKR1 , DSN=ADABASVv . WORK , VOL=WORKV1
DATADEF  DDREST1 , DSN=ADABASVv . SAVE , MODE=A
DATADEF  DDPLOG , DSN=ADABASVv . SIBA , MODE=A
DATADEF  DDPRINT , DSN=ADASAV . DDPRINT , MODE=A
DATADEF  DUMP , DUMMY
DATADEF  DDDRUCK , DSN=ADASAV . DDDRUCK , MODE=A
DATADEF  DDCARD , DSN=RUNSAV . CONTROL , MODE=A
DATADEF  DDKARTE , DSN=RESTONL . CONTROL , MODE=A
ADARUN

```

### *Contents of RUNSAV CONTROL AI*

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

### *Contents of RESTONL CONTROL AI*

```
ADASAV  RESTONL  FILES=2 , PLOGNUM=ppp , SYN1=1
```

## **Restore Protection Log After Interrupted RESTONL Function**

```

DATADEF  DDASSOR1 , DSN=ADABASVv . ASSO , VOL=ASSOV1
DATADEF  DDDATAR1 , DSN=ADABASVv . DATA , VOL=DATAV1
DATADEF  DDWORKR1 , DSN=ADABASVv . WORK , VOL=WORKV1
DATADEF  DDPLOG , DSN=ADABASVv . PLOG , MODE=A
DATADEF  DDPRINT , DSN=ADASAV . DDPRINT , MODE=A
DATADEF  DUMP , DUMMY
DATADEF  DDDRUCK , DSN=ADASAV . DDDRUCK , MODE=A
DATADEF  DDCARD , DSN=RUNSAV . CONTROL , MODE=A
DATADEF  DDKARTE , DSN=RESTFILE . CONTROL , MODE=A
ADARUN

```

### *Contents of RUNSAV CONTROL AI*

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

### *Contents of RESTFILE CONTROL AI*

```
ADASAV  RESTPLOG  FILES=2 , PLOGNUM=ppp , SYN1=1
```

## Restore Files from SAVE Datasets Created Offline

```
DATADEF DDASSOR1 , DSN=ADABASVv . ASSO , VOL=ASSOV1
DATADEF DDDATAR1 , DSN=ADABASVv . DATA , VOL=DATAV1
DATADEF DDWORKR1 , DSN=ADABASVv . WORK , VOL=WORKV1
DATADEF DDREST1 , DSN=ADABASVv . SAVE , MODE=A
DATADEF DDPRINT , DSN=ADASAV . DDPRINT , MODE=A
DATADEF DUMP , DUMMY
DATADEF DDDRUCK , DSN=ADASAV . DDDRUCK , MODE=A
DATADEF DDCARD , DSN=RUNSAV . CONTROL , MODE=A
DATADEF DDKARTE , DSN=RESTORE . CONTROL , MODE=A
ADARUN
```

### *Contents of RUNSAV CONTROL A1*

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

### *Contents of RESTORE CONTROL A1*

```
ADASAV RESTORE FMOVE=2
```

## VSE/ESA

File	Symbolic Name	Storage	Logical Unit	Information
Associator	ASSORn	disk	see note 1	
Data Storage	DATARn	disk	see note 1	
Work	WORKR1	disk	see note 1	Required if Adabas nucleus is not active
Multiple protection log	PLOGRn	disk		Optional for RESTORE and RESTONL database/GCB
Multiple command log	CLOGRn	disk		Optional for RESTORE and RESTONL database/GCB
Recovery log (RLOG)	RLOGR1	disk		Required for ADARAI
Backup copy	SAVE1-8	tape disk	SYS011- SYS018 see note 1	Required for SAVE
Dual copy	DUAL1-8	tape disk	SYS021- SYS028 see note 1	Required for SAVE with two backup copies
Backup copy (input for RESTORE)	REST1-8	tape disk	SYS011- SYS018 see note 1	Required for RESTORE and RESTONL
Sequential protection log	PLOG	tape disk	SYS010 see note 1	Required for RESTONL and RESTPLOG
ADARUN parameters	SYSRDR CARD CARD	reader tape disk	SYSRDR SYS000 See note 1	
ADASAV parameters		reader	SYSIPT	
ADARUN messages		printer	SYSLST	
ADASAV messages		printer	SYS009	

**Notes:**

1. Any programmer logical unit may be used.
2. For RESTONL, the input SAVE tapes and the sequential protection log can be concatenated, using the name REST1.

## ADASAV JCS Examples (VSE/ESA)

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

Refer to the following members for these examples:

Example	Member
Save database	ADASAV.X
Save database with two copies of output	ADASAVT.X
Restore database	ADASAVR.X
Restore files from save datasets created online	ADASAVRO.X
Restore protection log after an interrupted RESTONL function	ADASAVRP.X
Restore files from save datasets created offline	ADASAVRF.X

### Save Database

```
* $$ JOB JNM=ADASAV,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAV
*      SAVE THE ENTIRE DATABASE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS011,TAPE
// PAUSE MOUNT LOAD SAVE FILE ON TAPE cuu
// TLBL SAVE1,'EXAMPLE.DByyyyy.SAVE'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADASAV SAVE
/*
/&
* $$ EOJ
```

### Save Database with Two Copies of Output

```
* $$ JOB JNM=ADASAVT,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAVT
*      SAVE THE ENTIRE DATABASE CREATING TWO COPIES OF THE OUTPUT
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// PAUSE MOUNT LOAD SAVE TAPES ON cu1 AND cu2
// ASSGN SYS011,TAPE
// TLBL SAVE1,'EXAMPLE.DByyyyy.SAVE'
// ASSGN SYS021,TAPE
// TLBL DUAL1,'EXAMPLE.DByyyyy.SAVE.COPY'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
```

```
ADASAV SAVE TWOCOPIES
/*
/&
* $$ EOJ
```

## Restore Database

```
* $$ JOB JNM=ADASAVR,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAVR
*       RESTORE THE ENTIRE DATABASE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS011,TAPE
// PAUSE MOUNT LOAD SAVE FILE ON TAPE cuu
// TLBL REST1,'EXAMPLE.DByyyyyy.SAVE'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyyy
/*
ADASAV RESTORE OVERWRITE
/*
/&
* $$ EOJ
```

## Restore Files from Save Datasets Created Online

```
* $$ JOB JNM=ADASAVRO,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAVRO
*       RESTORE FILES FROM SAVE DATA SETS CREATED ONLINE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// PAUSE MOUNT LOAD SAVE FILE ON TAPE cu1 AND PLOG ON TAPE cu2
// ASSGN SYS011,TAPE
// TLBL REST1,'EXAMPLE.DByyyyyy.SAVE'
// ASSGN SYS010,TAPE
// TLBL PLOG,'EXAMPLE.DByyyyyy.PLOG5'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyyy
/*
ADASAV RESTONL FILES=2,PLOGNUM=ppp,SYN1=1
/*
/&
* $$ EOJ
```

## Restore Protection Log after an Interrupted RESTONL Function

```
* $$ JOB JNM=ADASAVRP,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAVRP
*       RESTORE THE PROTECTION LOG AFTER AN INTERRUPTED RESTONL
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// PAUSE MOUNT LOAD PLOG FILE ON TAPE cuu
// ASSGN SYS010,TAPE
// TLBL PLOG,'EXAMPLE.DByyyyyy.PLOG5'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyyy
/*
```



```
ADASAV RESTPLOG PLOGNUM=ppp,SYN1=1
/*
/&
* $$ EOJ
```

### Restore Files From Save Datasets Created Offline

```
* $$ JOB JNM=ADASAVRF,CLASS=A,DISP=D
* $$ LST CLASS=A,DISP=D
// JOB ADASAVRF
*       RESTORE A FILE TO ANY RABNS FROM AN OFFLINE SAVE
// EXEC PROC=ADAVvLIB
// EXEC PROC=ADAVvFIL
// ASSGN SYS011,TAPE
// PAUSE MOUNT LOAD SAVE FILE ON TAPE cuu
// TLBL REST1,'EXAMPLE.DByyyyy.SAVE'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADASAV RESTORE FMOVE=2
/*
/&
* $$ EOJ
```