

JCL/JCS Requirements and Examples

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

This chapter covers the following topics:

- BS2000
 - z/OS
 - z/VM
 - VSE
-

BS2000

Data Set	Link Name	Storage	More Information
Associator	DDASSOR n	disk	
Data Storage	DDDATAR n	disk	

Data Set	Link Name	Storage	More Information
Work	DDWORKR1 DDWORKR n (1-9) to DDWORK mn (10-32) in cluster environments	disk	A Work data set is <i>not</i> required for: <ul style="list-style-type: none"> ● any ADASAV SAVE functions ● ADASAV RESTONL FMOVE and ADASAV RESTONL FILES functions ● ADASAV RESTORE FMOVE and ADASAV RESTORE FILES functions ● ADASAV RESTPLOG functions A Work data set is <i>recommended</i> for: <ul style="list-style-type: none"> ● ADASAV RESTONL and ADASAV RESTONL GCB functions ● ADASAV RESTORE and ADASAV RESTORE GCB functions In these cases, if a Work data set is specified, the ADASAV function resets it; if a Work data set is not specified, no Work data sets are reset. <p>Note: In an Adabas Cluster Services or Adabas Parallel Services cluster, where each cluster has its own Work data set, the Work data sets of all nuclei in the cluster should be specified for the RESTONL/RESTORE or RESTONL GCB/RESTORE GCB functions.</p> If a database is restored and the Work data set has not been reset, nucleus error 72 (PARM ERROR 72) may occur. To resolve this, you can reset any Work data sets using the ADAFRM utility.
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

Data Set	Link Name	Storage	More Information
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 DDSAVE1,ADAyyyyyy.SAVE1,TAPE(FILE-SEQ=1)
/SET-FILE-LINK DDDUAL1,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
    
```

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 ADAyyyyy.ASSO , LINK=DDASSOR1, SHARUPD=YES
/FILE ADAyyyyy.DATA , LINK=DDDATAR1, SHARUPD=YES
/FILE ADAyyyyy.SAVE1 , LINK=DDSAVE1 , DEVICE=TAPE-C1, VOLUME=SAV101
/FILE ADAyyyyy.DUAL1 , LINK=DDDUAL1 , DEVICE=TAPE-C1, VOLUME=SAV201
/EXEC (ADARUN, ADA.MOD)
ADARUN PROG=ADASAV, DB=yyyyy, IDTNAME=ADABAS5B
ADASAV SAVE TWOCOPIES
/LOGOFF NOSPOOL

```

Restore Files from SAVE Data Sets 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, ADAyyyyy.ASSO, SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1, ADAyyyyy.DATA, SHARE-UPD=YES
/SET-FILE-LINK DDREST1, ADAyyyyy.SAVE1
/SET-FILE-LINK DDPLOG, ADAyyyyy.PLOG
/START-PROGRAM *M(ADA.MOD, ADARUN), PR-MO=ANY
ADARUN PROG=ADASAV, DB=yyyyy, IDTNAME=ADABAS5B
ADASAV RESTONL 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 FILES, RESTORE DATABASE
/REMARK * FROM ONLINE CREATED SAVE DATASETS
/REMARK *

/SYSFILE SYSLST=L.SAV.REON
/FILE ADA.MOD, LINK=DDLIB
/FILE ADAyyyyy.ASSO , LINK=DDASSOR1, SHARUPD=YES
/FILE ADAyyyyy.DATA , LINK=DDDATAR1, SHARUPD=YES
/FILE ADAyyyyy.SAVE1 , LINK=DDREST1
/FILE ADAyyyyy.PLOG , LINK=DDPLOG
/EXEC (ADARUN, ADA.MOD)
ADARUN PROG=ADASAV, DB=yyyyy, 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 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

```

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
/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 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.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 Data Sets 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,ADAYyyyyy.ASSO,SHARE-UPD=YES
/SET-FILE-LINK DDDATAR1,ADAYyyyyy.DATA,SHARE-UPD=YES
/SET-FILE-LINK DDREST1,ADAYyyyyy.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 ADAyyyyyy.ASSO ,LINK=DDASSOR1,SHARUPD=YES
/FILE ADAyyyyyy.DATA ,LINK=DDDATAR1,SHARUPD=YES
/FILE ADAyyyyyy.SAVE1 ,LINK=DDREST1
/EXEC (ADARUN,ADA.MOD)
ADARUN PROG=ADASAV,DB=yyyyyy, IDTNAME=ADABAS5B
ADASAV RESTORE FMOVE=2
/LOGOFF NOSPOOL

```

z/OS

Data Set	DD Name	Storage	More Information
Associator	DDASSOR n	disk	
Data Storage	DDDATAR n	disk	
Work	DDWORKR1 DDWORKR n (1-9) to DDWORK nn (10-32) in cluster environments	disk	<p>A Work data set is <i>not</i> required for:</p> <ul style="list-style-type: none"> ● any ADASAV SAVE functions ● ADASAV RESTONL FMOVE and ADASAV RESTONL FILES functions ● ADASAV RESTORE FMOVE and ADASAV RESTORE FILES functions ● ADASAV RESTPLOG functions <p>A Work data set is <i>recommended</i> for:</p> <ul style="list-style-type: none"> ● ADASAV RESTONL and ADASAV RESTONL GCB functions ● ADASAV RESTORE and ADASAV RESTORE GCB functions <p>In these cases, if a Work data set is specified, the ADASAV function resets it; if a Work data set is not specified, no Work data sets are reset.</p> <p>Note: In an Adabas Cluster Services or Adabas Parallel Services cluster, where each cluster has its own Work data set, the Work data sets of all nuclei in the cluster should be specified for the RESTONL/RESTORE or RESTONL GCB/RESTORE GCB functions.</p> <p>If a database is restored and the Work data set has not been reset, nucleus error 72 (PARM ERROR 72) may occur. To resolve this, you can reset any Work data sets using the ADAFRM utility.</p>
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

Data Set	DD Name	Storage	More Information
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 (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.ADAvrs.LOAD <=== ADABAS LOAD
//*
//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <=== ASSO
//DDDATAR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <=== DATA
//DDSAVE1 DD DSN=EXAMPLE.DByyyyyy.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 JOBS data set 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.ADAvrs.LOAD <=== ADABAS LOAD
//*

//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <=== ASSO
//DDDATAR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <=== DATA
//DDSAVE1 DD DSN=EXAMPLE.DByyyyyy.DDSAVE1,UNIT=TAPE, <=== OUTPUT
// DISP=(,CATLG),VOL=SER=ADABCK
//DDDUAL1 DD DSN=EXAMPLE.DByyyyyy.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=yyyyyy
/*
//DDKARTE DD *
ADASAV SAVE TWOCOPIES
/*
```

Refer to ADASAVT in the JOBS data set 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.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
//DDREST1 DD DSN=EXAMPLE.DByyyyyy.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=yyyyyy
/*
//DDKARTE DD *
ADASAV RESTORE OVERWRITE
/*
```

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

Restore Files From SAVE Data Sets 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.ADAvrs.LOAD <=== ADABASLOAD
//*
//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <=== ASSO
//DDDATAR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <=== DATA
//DDREST1 DD DSN=EXAMPLE.DByyyyyy.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=yyyyyy
/*
//DDKARTE DD *
ADASAV RESTORE FMOVE=2
/*
```

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

Restore Files From SAVE Data Sets 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.ADAvrs.LOAD <=== ADABAS LOAD
//*
//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <=== ASSO
//DDDATAR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <=== DATA
//DDREST1 DD DSN=EXAMPLE.DByyyyyy.SAVE, <=== SAVE OUTPUT
//          DISP=OLD,UNIT=TAPE,VOL=SER=ADABCK
//DDPLOG DD DSN=EXAMPLE.DByyyyyy.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=yyyyyy
/*
//DDKARTE DD *
ADASAV RESTONL FILES=2,PLOGNUM=ppp,SYN1=1
/*
```

Refer to ADASAVRO in the JOBS data set 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.ADAvrs.LOAD <=== ADABAS LOAD
//*

//DDASSOR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.ASSOR1 <=== ASSO
//DDATAR1 DD DISP=SHR,DSN=EXAMPLE.DByyyyyy.DATAR1 <=== DATA
//DDPLOG DD DSN=EXAMPLE.DByyyyyy.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=yyyyyy
/*
//DDKARTE DD *
ADASAV RESTPLOG PLOGNUM=ppp,SYN1=1
/*
```

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

z/VM

Data Set	DD Name	Storage	More Information
Associator	DDASSOR n	disk	
Data Storage	DDDATAR n	disk	

Data Set	DD Name	Storage	More Information
Work	DDWORKR1 DDWORKR _n (1-9) to DDWORK _{nn} (10-32) in cluster environments	disk	<p>A Work data set is <i>not</i> required for:</p> <ul style="list-style-type: none"> ● any ADASAV SAVE functions ● ADASAV RESTONL FMOVE and ADASAV RESTONL FILES functions ● ADASAV RESTORE FMOVE and ADASAV RESTORE FILES functions ● ADASAV RESTPLOG functions <p>A Work data set is <i>recommended</i> for:</p> <ul style="list-style-type: none"> ● ADASAV RESTONL and ADASAV RESTONL GCB functions ● ADASAV RESTORE and ADASAV RESTORE GCB functions <p>In these cases, if a Work data set is specified, the ADASAV function resets it; if a Work data set is not specified, no Work data sets are reset.</p> <p>Note: In an Adabas Cluster Services or Adabas Parallel Services cluster, where each cluster has its own Work data set, the Work data sets of all nuclei in the cluster should be specified for the RESTONL/RESTORE or RESTONL GCB/RESTORE GCB functions.</p> <p>If a database is restored and the Work data set has not been reset, nucleus error 72 (PARM ERROR 72) may occur. To resolve this, you can reset any Work data sets using the ADAFRM utility.</p>
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

Data Set	DD Name	Storage	More Information
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 (z/VM)

Save Database

```

DATADEF DDASSOR1,DSN=ADABASVv.ASSO,VOL=ASSOV1
DATADEF DDDATAR1,DSN=ADABASVv.DATA,VOL=DATAV1
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 A1

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

Contents of ADASAV CONTROL A1

```
ADASAV SAVE TWOCOPIES
```

Restore Files from SAVE Data Sets Created Online

```

DATADEF DDASSOR1,DSN=ADABASVv.ASSO,VOL=ASSOV1
DATADEF DDDATAR1,DSN=ADABASVv.DATA,VOL=DATAV1
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 A1

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

Contents of RESTONL CONTROL A1

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 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 A1

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

Contents of RESTFILE CONTROL A1

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

Restore Files from SAVE Data Sets Created Offline

```
DATADEF DDASSOR1,DSN=ADABASVv.ASSO,VOL=ASSOV1
DATADEF DDDATAR1,DSN=ADABASVv.DATA,VOL=DATAV1
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

File	Symbolic Name	Storage	Logical Unit	Information
Associator	ASSORn	disk	see note 1	
Data Storage	DATARn	disk	see note 1	

File	Symbolic Name	Storage	Logical Unit	Information
Work	WORKR1 WORKR n (1-9) to WORK nn (10-32) in cluster environments	disk	see note 1	<p>A Work data set is <i>not</i> required for:</p> <ul style="list-style-type: none"> ● any ADASAV SAVE functions ● ADASAV RESTONL FMOVE and ADASAV RESTONL FILES functions ● ADASAV RESTORE FMOVE and ADASAV RESTORE FILES functions ● ADASAV RESTPLOG functions <p>A Work data set is <i>recommended</i> for:</p> <ul style="list-style-type: none"> ● ADASAV RESTONL and ADASAV RESTONL GCB functions ● ADASAV RESTORE and ADASAV RESTORE GCB functions <p>In these cases, if a Work data set is specified, the ADASAV function resets it; if a Work data set is not specified, no Work data sets are reset.</p> <p>Note: In an Adabas Cluster Services or Adabas Parallel Services cluster, where each cluster has its own Work data set, the Work data sets of all nuclei in the cluster should be specified for the RESTONL/RESTORE or RESTONL GCB/RESTORE GCB functions.</p> <p>If a database is restored and the Work data set has not been reset, nucleus error 72 (PARM ERROR 72) may occur. To resolve this, you can reset any Work data sets using the ADAFRM utility.</p>
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

File	Symbolic Name	Storage	Logical Unit	Information
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)

See Library and File Procedures for VSE Examples for descriptions of the VSE 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 data sets created online	ADASAVRO.X
Restore protection log after an interrupted RESTONL function	ADASAVRP.X
Restore files from save data sets 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.DByyyyy.SAVE'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADASAV RESTORE OVERWRITE
/*
/&
* $$ EOJ

```

Restore Files from Save Data Sets 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.DByyyyy.SAVE'
// ASSGN SYS010,TAPE
// TLBL PLOG,'EXAMPLE.DByyyyy.PLOG5'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
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.DByyyyy.PLOG5'
// EXEC ADARUN,SIZE=ADARUN
ADARUN PROG=ADASAV,SVC=xxx,DEVICE=dddd,DBID=yyyyy
/*
ADASAV RESTPLOG PLOGNUM=ppp,SYN1=1
/*
/&
* $$ EOJ

```

Restore Files From Save Data Sets 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

```