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May 1992
for
Operator's Guide to Data Backup and Recovery

DOC10324-1LA

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Appendix B

OPERATOR'S GUIDE TO DATA BACKUP AND RECOVERY

First Edition

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This manual documents the software operation of the PRIMOS operating system on 50 Series computers and their supporting systems and utilities as implemented at Master Disk Revision Level 23.3 (Rev. 23.3).

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ABOUT THIS BOOK

The *Operator's Guide to Data Backup and Recovery* describes the features of the products MAGSAV, MAGRST and PSR at PRIMOS Revisions 21.0 and later, and gives comprehensive guidance on their use.

Enhanced MAGSAV/RST is issued as an independent product release (IPR) which runs on PRIMOS Revs. 21.0 and 22.0, and as a standard product implemented at Master Disk Rev. 23.0. Although the enhanced product is not supported on earlier PRIMOS revisions, you can use it to transfer data between systems running on revisions later than and including PRIMOS Rev. 19.0.

PSR is issued as an independent product release (IPR) which runs on PRIMOS Rev. 22.0, and as a standard product implemented at Master Disk Revision Level 23.0.

This document has been updated at Rev. 23.1 to include information on creating and configuring extended index library files which contain index information created during a save to tape. It also describes two new commands, INDEX_LIB_MANAGER which allows you to manage these index files, and SEARCH_INDEX_LIB which allows you to search the indexes for a specific character string.

The second update at Rev. 23.3 includes documentation corrections and additional information on using MAGSAV with the -UPDT option. Appendix B documents MAGSAV and MAGRST messages.

Chapter Contents

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|---------------|--|
| PART I | Enhanced MAGSAV/RST |
| Chapter 1 | Describes the features of enhanced MAGSAV/RST. The advantages and capabilities of the product are discussed, as well as aspects that you should be aware of when using it. |
| Chapter 2 | Describes how to perform a logical save to tape using enhanced MAGSAV. |

OPERATOR'S GUIDE TO DATA BACKUP AND RECOVERY

- Chapter 3** Describes how to restore a logical tape save using enhanced MAGRST.
- Chapter 4** Describes how to create and use a boot tape.
- Chapter 5** Gives details on indexing the contents of tapes saved using MAGSAV.
- PART II** **Physical Save and Restore**
- Chapter 6** Describes how to perform a physical save to tape using PSR.
- Chapter 7** Describes how to restore a physical tape save using PSR.
- Chapter 8** Describes how to perform a physical copy between disks using PSR.
- PART III** **System Backups: Administration**
- Chapter 9** Describes the factors you should consider when defining a backup strategy.
- Chapter 10** Gives step-by-step procedures to shut down and restart either the entire system or particular partitions before and after running MAGSAV/RST and PSR.
- PART IV** **New Features at Rev. 23.1**
- Chapter 11** Gives details of the enhanced MAGSAV/RST library management commands INDEX_LIB_MANAGER and SEARCH_INDEX_LIB.
- Appendix A** Glossary defines terms used in this guide
- Appendix B** MAGSAV and MAGRST messages

Superseded Products

Enhanced MAGSAV/RST supersedes the logical save and restore utilities available as standard products on PRIMOS Rev. 22.0 and earlier revisions.

PSR supersedes the physical save and restore utilities available as standard products on PRIMOS Rev. 22.0 and earlier revisions.

Manuals which refer to these earlier utilities are superseded by this guide.

Related Documentation

Listed below are the manuals that contain information that may be useful to users of save and restore utilities.

- **The PRIME CPU Handbook for your machine**
- ***MAGNET User's Guide* DOC10156-1LA (Rev. 21.0)
and its update package UPD10156-11A (Rev. 22.0)**
- ***Operator's Guide to File System Maintenance* DOC9300-6LA (Rev. 23.3)**
- ***Operator's Guide to System Commands* DOC9304-6LA (Rev. 23.3)**
- ***Operator's Master Index* DOC10110-5LA (Rev. 23.3)**
- ***PRIMOS User's Guide* DOC4130-5LA (Rev. 22.0)**
- ***PRIMOS Commands Reference Guide* DOC3108-8LA (Rev. 23.3)**
- ***System Administrator's Guide Vol. I: System Configuration* DOC10131-3LA (Rev. 23.0)**
- ***System Administrator's Guide Vol. II: Communication Lines and Controllers*
DOC10132-2LA (Rev. 22.0), and RLN10132-21A (Rev. 22.1)**
- ***System Administrator's Guide Vol. III: System Access and Security* DOC10133-3LA (Rev. 23.0)**
- ***PRIMOS User's Release Document* DOC10316-1PA (Rev. 23.0)**
- ***Rev. 23.0 Software Release Document* DOC10001-7PA (Rev. 23.0)**
- ***Rev. 23.1 Software Release Document* DOC10001-8PA (Rev. 23.1)**
- ***Rev. 23.2 Software Release Document* DOC10001-9PA (Rev. 23.2)**
- ***Rev. 23.3 Software Release Document* DOC13134-1PA (Rev. 23.3)**

Prime Documentation Conventions

The following conventions are used in command formats, statement formats, and in examples throughout this document. Command and statement formats show the syntax of commands, program language statements, and callable routines. Examples illustrate the uses of these commands, statements, and routines in typical applications. Terminal input may be entered in either upper case or lower case.

<i>Convention</i>	<i>Explanation</i>	<i>Example</i>
UPPERCASE	In command formats, words in uppercase indicate the actual names of commands, statements, and key words. They can be entered in either uppercase or lowercase.	MAGSAV
lowercase	In command formats, words in lowercase represent items for which you must substitute a value.	COPY pathname
Abbreviations in format statements	If an uppercase word in a command format has an abbreviation it is shown below.	{ ASSIGN } AS
<u>Underscore</u> in examples	In examples, user input is underscored but system prompts and output are not.	OK, <u>PROP -STATUS</u>
Brackets []	Brackets enclose a list of one or more optional items. Choose none, one or more of these.	INDEX [pathname]
Braces { }	Braces enclose a list of optional items. Choose only one of these.	SPEED { -25 } { -100 }
Ellipsis ...	An ellipsis indicates that the preceding item may be repeated.	item-x [, item-y] ...
Hyphen -	Wherever a hyphen appears in a command line option it is a required part of that option.	MAGSAV -INC
Angle Brackets < >	Angle brackets are used to separate the elements of a pathname.	< MFD > SPOOL* > DOC
Octal ^ or ^	The ^ or ^ symbol shows that the number is given as an octal value.	^240 or ^240 are equivalent to 160 (base 10)

Use of DTB for Incremental Control

During an incremental save, only those files are saved that have been modified since the last base or incremental save. The standard pre-Rev. 23.0 MAGSAV product used the dumped bit switch setting to determine whether or not the file had been modified or created since the last save. Enhanced MAGSAV makes use of the attributes DTB and DTM for incremental control. These attributes give the date and time that the object was last backed up or modified. MAGSAV compares the value of DTB and that of DTM, and saves the object if the DTM is later than the DTB. When you use the option -UPDT, enhanced MAGSAV sets the DTB of saved files to the current date and time, but does not set the file's dumped bit, except in the case of Recovery Based Files, which are described below. Details on incremental saves are given in Chapter 2, Logical Save to Tape: MAGSAV.

When saving Recovery Based Files (RBFs), MAGSAV calls Recovery Oriented Access Method (ROAM) subroutines. At PRIMOS Revs. 21.0 and 22.0, these subroutines rely on the setting of the dumped bit to determine whether or not to save these files during an incremental save. Therefore, if you are using enhanced MAGSAV at PRIMOS Rev. 21.0 or 22.0 to save RBFs with the -UPDT option, the system updates the DTB and also sets the dumped bit of saved RBFs.

Support of Labeled Tapes

When you save a tape using enhanced MAGSAV, the system automatically writes an ANSI label at the start of the reel of tape. You can specify the volume serial ID for the ANSI label using the enhanced MAGSAV option -LABEL. This means that each reel of tape contains an identifier on tape, as well as on the adhesive label. This helps considerably in the administration of large tape libraries. Details on this option are given in Chapter 2, Logical Save to Tape: MAGSAV.

Handling of Unrecoverable Read and Write Errors

An unrecoverable read error occurs when the system fails to read a tape block after 20 attempts. The block is lost completely and the system skips past it to read the remaining data. If the block lost is a directory block, enhanced MAGRST recognizes this, and recreates the missing directory (with default security and attribute settings), so that subsequent tape files are restored at the correct level.

An unrecoverable write error occurs when the system fails to write a tape block after 20 attempts. You cannot write any more data to that reel of tape. When an unrecoverable error occurs, the system rewinds the tape to the last checkpoint, and overwrites the existing data with end-of-tape (EOT) labels. MAGSAV then prompts you to mount another tape and continues the save on the newly mounted reel from the point at which the previous reel was truncated.

Note

If you are using a 60 MB cartridge drive (QIC-02), the system cannot truncate the tape as described above. These drives allow you to append data to the tape only, and the system cannot backspace and overwrite previously written data with EOT labels. If the system encounters an error when writing to one of these drives, you are prompted to mount another tape and the system then resaves all the data written to the errored reel on the newly mounted reel. Details on saving cartridge tapes, are given in Chapter 2, Logical Save to Tape: MAGSAV.

Cumulative Incremental Save: Use the following command to run a cumulative incremental save:

OK, MAGSAV -INC

The `-INC` option instructs the system to save only those files or directories whose DTB is later than the DTB. The system does not update the DTB of saved objects. The next time you run an incremental save, the system saves the same objects again, as well as any others that have been updated since this save. When you restore to disk, you need to restore the base save and the latest incremental save.

True Incremental Save: Use the following command to run a true incremental save:

OK, MAGSAV -INC -UPDT

The `-INC` option instructs the system to save objects in the same way as when running a cumulative incremental save. The `-UPDT` option instructs the system to update the DTB of objects saved. The next time you run an incremental save, the system saves only those objects that have been modified since this save. When you restore to disk, you need to restore the base save and all incremental saves since the base save.

The MAGSAV Dialog

After you invoke MAGSAV by issuing the command and options, the MAGSAV dialog begins. Shown below are the system prompts in the order in which they appear, together with the appropriate user responses. Note that if you are saving to a 60MB cartridge tape, the dialog is slightly different from that shown below. These differences are described in the section, Saving to a 60MB Cartridge Drive, later in this chapter.

Prompt

User Response

Tape unit:

Enter the logical tape unit number for the tape drive you wish to use. The system assumes you are using a 9-track tape unit. Enter Q, or QUIT to quit the program.

If the reel is in ANSI format, the label on tape may contain a volume serial ID that identifies the reel of tape. If it does, a message of the following form is displayed:

Volume serial ID is MYVOL1.

Enter logical tape number:

Enter a number that denotes the sequential number on the tape for the logical tape you wish to save. Enter 1 for the first save on the reel, 2 for the second and so on. MAGSAV positions the tape to the start of the required logical tape. If you enter APPEND this will position the tape at the end of the last save on tape. If you enter the value 0 or press

MAGSAV assumes that the tape is already correctly positioned. Enter Q or QUIT to quit the program.

If you used the -QUERY option and are writing to an ANSI reel that already contains data, a prompt of the form shown below appears:

```
Logical tape no: 1, Tape name: MYTAPE
Logical Tape 1 already exists on MYVOL1:
OK to overwrite(Y/N):
```

Answer YES to overwrite the existing logical tape. If you answer NO, you are requested to enter another logical tape number.

If you used the -LABEL option, and are about to write the first logical tape on an unlabelled ANSI reel, the following prompt appears:

```
Enter volume serial ID:
```

Enter an alphanumeric string of a maximum length of 6 characters. The characters must belong to the ANSI character set. If you specify non-ANSI characters, the system prompts you to reenter the volume serial ID. This string is written to the tape label and is used to give the reel of tape a unique identity. Strings longer than the maximum length are truncated to the first 6 characters; strings shorter than 6 characters are padded with blanks.

You cannot mix formats on tape. If you write to a tape that already contains data in a format different from the one you are using, you must overwrite all the data already on tape by specifying a logical tape number of 1. Otherwise the system prompts you to reenter the logical tape number, as shown below:

```
Tape unit: 1
Enter logical tape number: 2
Tape formats do not match.
Logical tape number must be 1
Enter logical tape number: 1
```

Tape name:

Enter an alphanumeric string of a maximum length of 32 characters. For tapes written in non-ANSI format, the name is truncated to the first 6 characters when written to tape.

Date (mm dd yy):

Press **Return** to enter the displayed current date (represented here by *mm dd yy*). You can also enter the date in the format *mm dd yy*, where *mm*=month, *dd*=day, and *yy*=year. PRIMOS checks the date format and rejects it if it is invalid.

Rev. no:

Enter a decimal integer to specify the Revision number you are using. If you press

Return

the field is set to 0. Non-integer values are not allowed.

Name or Command:

Enter the name of the object to save, or enter one of the subcommands that modify the mode of operation of the save. The subcommands are discussed below.

Notes

The action of the subcommand applies to all objects that are saved after you issue the subcommand.

Pathnames are not allowed; therefore before specifying the object to be saved, you should be attached to the directory containing that object. You can change your attach point using the \$A subcommand.

After you enter the object name, the save begins. If MAGSAV cannot access a file during the save operation, the system continues with the next file or directory to be saved, if any.

When the save is complete, the prompt **Name or Command:** is redisplayed, and you can continue saving further objects or issue a subcommand. Enter the subcommand \$Q, \$R, or \$UNload to return to PRIMOS when you have finished.

You can make any one of the following responses to this system prompt:

objectname
 *
 MFD
 \$A *pathname*
 \$Index [*pathname*] [*n*]
 \$E *pathname* [*n*]
 \$INC ON
 \$INC OFF
 \$Q
 \$R
 \$UNload
 \$TTY
 \$Updt ON
 \$Updt OFF

objectname saves the file or directory specified. You should be attached to the directory containing the object *objectname*. The full pathname of the object is saved.

* saves all files and directories within the current directory. The name of the directory to which you are attached is omitted from the pathnames on tape.

MFD saves the entire partition. You must be attached to the MFD of the partition. All saved objects have MFD as the first element of their pathname on tape.

Note

At Rev. 23, if you add a partition using the -MOUNT_PATH option, so it is mounted lower in the file system, MAGSAV will not save the entire partition at the point to which you are attached.

\$A *pathname* attaches you to the specified directory *pathname* on disk. Supply a password if needed.

\$Index [*pathname*] [*n*] generates an index of the save operation. If you omit *pathname*, the index is displayed on the screen. If you specify *pathname*, the index is written to the file specified, and is not displayed on the screen. If the file already exists, the index is appended to that file. You cannot specify passwords in the pathname. The argument *n* is a decimal integer that specifies the number of directory levels in the index. If you omit *n*, the default is two levels.

\$E *pathname* [*n*] generates an extended index of the save operation. The index is written to the file specified by *pathname*. If the file already exists, the index is appended to that file. You cannot specify passwords in the *pathname*. The argument *n* is a decimal integer that specifies the number of directory levels in the index. If you omit *n*, the default is two levels. For further information on extended index format see Chapter 5, Tape Indexing.

\$INC ON turns on incremental save mode. Only those objects are saved whose DTB is later than their DTB. (At PRIMOS Revs. 21.0 and 22.0, RBFs are saved if the dumped bit is 0.) This subcommand has the same effect as the **-INC** command line option.

\$INC OFF turns off incremental save mode, whether you set incremental mode using option **-INC**, or subcommand **\$INC ON**. All objects subsequently specified are saved, irrespective of their DTB and DTM settings, (or the dumped bit setting for RBFs). This is the default.

\$Q terminates the logical tape and returns you to PRIMOS.

\$R terminates the logical tape, rewinds the reel, and returns you to PRIMOS.

\$TTY Use this subcommand when running MAGSAV from CPL or command input (COMI) files. Instructs MAGSAV to prompt you to enter the tape unit number from your terminal. All other information is taken from the CPL or COMI files.

\$UNLOAD terminates the logical tape, rewinds the tape, and unloads the reel.

\$UPDT ON turns on update mode. MAGSAV updates the DTB on objects subsequently saved. (At PRIMOS Revs. 21.0 and 22.0, the dumped bit of RBFs is set to 1.) This subcommand has the same effect as the **-UPDT** command line option. To use this subcommand, you must be a member of the **.BACKUP\$ ACL** group, or else you must have invoked MAGSAV from the supervisor terminal.

\$UPDT OFF turns off update mode whether you set update mode using option **-UPDT**, or subcommand **\$UPDT ON**. MAGSAV does not update the DTB on objects subsequently saved. (In the case of RBFs, the dumped bit is not set.) This is the default.

End of Tape Handling

If the system encounters an end-of-tape (EOT) when writing to tape, an informative message is displayed, the system rewinds the tape (and unloads it, if you specified -UNLOAD), and prompts you to enter the tape unit number for the continuation tape. A typical output is shown below:

```
End of reel (Volume serial ID MYVOL1)
Mount continuation reel
Continuation tape unit: 1
```

The save then continues from the beginning of the newly mounted reel. The continuation tape unit does not have to be the same as the tape unit previously used. If you are running the save from a CPL or COMI file, use the option -TTY if you wish to enter the continuation tape unit number from your terminal.

Saving to a 60MB Cartridge Drive

When you run MAGSAV to save to a 60MB cartridge drive you can use the same command line options as those described earlier in this chapter. After you invoke MAGSAV, the format of the dialog differs slightly from that described on the previous pages, because with these drives you can append data only at the end of the existing data on tape, otherwise you must overwrite the entire contents of the tape.

Examples

The following two examples show typical outputs when running MAGSAV to save to a 60MB cartridge drive. Shown below is a typical output when overwriting the data on tape.

```
Tape Unit: 1
Volume serial ID is MYVOL1
Overwrite or Append (O/A): O
Tape Name: MYTAPE
Date (03 22 90): [RETURN]
Rev. no: 23
Name or Command: MYFILE
Tape initializing, please wait .....
```

MAGSAV erases all the existing data from the tape. This takes approximately two minutes, after which the save begins. Shown below is a typical output when appending to the data already on tape.

```
Tape Unit: 1
Volume serial ID is MYVOL1
Overwrite or Append (O/A): A
```

MAGSAV checks for end-of-tape (EOT) markers at the end of the last logical tape. If you aborted from the save when last writing to tape, these markers are not present; an error message is displayed, and you are prompted to re-enter the tape unit number.

When the system has located the EOT markers, the dialog continues with the prompts shown above in Example 1, and the data is appended to that already on the tape.

Listing the Tape Contents

You can list the contents of a MAGSAV tape by using MAGRST command with the subcommand NW. This produces an index of your tape without actually restoring the contents of the tape. Further details are given in Chapter 4, Logical Restore from Tape: MAGRST.

Save Procedure for an Entire Partition

You should first decide whether to shut down the entire system to users, or just the partition that you want to back up. For a full discussion of preparation procedures to follow before saving and restoring data, refer to Chapter 10 of this guide.

Shown below are the steps you should follow to use MAGSAV to save an entire partition.

If you have decided to shut down the entire system, follow the procedure described in Chapter 10 of this guide under the section, Procedure for Shutting Down the System.

If you have decided to shut down only the partition, follow the procedure described in Chapter 10 of this guide, under the section, Procedure for Removing a Partition from Service.

The following steps must be executed from your supervisor terminal if you have shut down the system, otherwise they may be executed from a user terminal.

1. Attach to the MFD of the partition that you are going to save. For example:

OK, ATTACH <DSK1>MFD

If the partition is mounted lower down in the file system you must use the mount point pathname.

2. Assign the tape unit for the tape that you are going to save. For example:

OK, ASSIGN MTL

3. Mount the reel of tape on the assigned drive. It is advisable to attach a physical label to the reel with the following information:
 - Your initials
 - The date and time of the save
 - The name of the partition being saved
 - The name of the system in use

- The PRIMOS Revision number
- The recording density on tape
- The block size used
- The reel number within the volume set, for example, TAPE 1 of N, where N represents the number of reels within the set, and should be filled in once the backup is complete
- The fact that MAGSAV has been used for the save

You should also leave room on the label for the volume serial ID, if it is not labeled permanently, and for the size of the save.

4. Invoke MAGSAV and enter the required response when prompted to do so. A typical example is as follows:

```
OK, MAGSAV -QUERY -LABEL
[MAGSAV Rev. 23.0 Copyright(c) 1990, Prime Computer, Inc.]
Tape unit: 1
Enter logical tape number: 1
Enter volume serial ID: MYVQL1
Tape name: MYTAPE
Date (03 22 90): [RETURN]
Rev. no: 23
Name or Command: MFD
Name or Command: UNLOAD
OK,
```

In the above example, it is assumed that only one reel of tape was required for saving the entire partition. If more than one reel is required, the EOT system prompts would be displayed, as described in the section, End of Tape Handling, earlier in this chapter.

5. When MAGSAV has completed the save, remove the last tape. It is important to fill in the blanks on the tape reel labels to indicate the number of tapes in the set, the size of the save and to add the volume serial ID if the reel is not already labeled. Remember also to remove the write-enable rings from the backup tapes, to avoid accidental overwriting.
6. Unassign the tape unit by issuing the following command:

```
OK, UNASSIGN MT1
```

7. Dismount the tape reel.
8. If you have shut down the entire system, restart the system by following the procedure described in Chapter 10 of this guide, under the section, Procedure for Starting Up the System.

If you have shut down only the partition, return it to service by following the procedure described in Chapter 10 of this guide, under the section, Procedure for Returning a Partition to Service.

Unattended Backup

The very high data capacity of the 8mm cartridge tape drive reduces the number of tapes required to store backup data. This may eliminate the need for operator intervention, and thus allow you to perform backup operations overnight.

Some systems have a total backup requirement of less than the capacity of a single 8mm cartridge tape. Larger systems require the use of multiple tapes. If you need to use multiple tapes for backup operations, the ability to run unattended backups will depend on your system having enough tape drives for you to mount all the required tapes before you initiate the backup. You can use the CPL program described in the following section to run unattended backups using multiple tapes, provided you mount and assign all the required tapes before you initiate the backup.

CPL Program for Multiple Tape Backups

You can use the CPL program described below to run a backup which requires more than one tape. The program allows for the overflow of a single partition onto more than one tape.

If you run MAGSAV under CPL control, the system sets three local variables when you terminate the save with the \$Q, \$R, or \$UNLOAD commands. These variables are as follows:

- DR\$TAPE_UNIT is the tape drive unit number on which the save finished.
- DR\$SAVE_NUMBER is the number of the last save written.
- DR\$VOLID is the final volume id.

These variables give the tape unit and save number of the save which has just completed, thus enabling you to calculate the tape unit and and save number for the next save.

In the following CPL program, each of the partitions P1, P2, P3, P4, and P5 are saved to tapes which have been previously mounted on tape units numbered sequentially from 0. These units must be assigned prior to the start of the CPL program.

The first partition is saved as save number 1, and the succeeding partitions as save numbers 2, 3, 4, and 5 respectively. The save name for each save is the name of the partition. Any existing data on these tapes will be overwritten.

```

&set_var DR$TAPE_UNIT := 0           /*First tape unit number

&set_var DR$SAVE_NUMBER := 1        /*First save number

&do partition &list P1 P2 P3 P4 P5  /*Start of loop for each

ATTACH <%partition%>mfd
&data MAGSAV
%DR$TAPE_UNIT%                       /*Tape unit no.
%DR$SAVE_NUMBER%                     /*Save no.
%PARTITION%                          /*Save name
                                        /*Defaults to current date
23                                    /*PRIMOS Rev. no.
$I 3                                  /*Index
*                                    /*Save MFD
    
```

```

[calc %DR$TAPE_UNIT% + 1]          /*Increment tape unit no.
                                   /*Enter further continuation
                                   /*devices here if necessary

$Q
&end
&set_var DR$SAVE_NUMBER := [calc %DR$SAVE_NUMBER% + 1]
                                   /*Increment save no.
&end                               /*End of loop

```

If the end of tape is reached during the partition save, the system prompts for the continuation unit number; this is returned to the system in the above program at the line where the tape unit number is incremented. The partition may overflow onto several physical tapes; in each case the next tape accessed is that on the next sequential tape unit number.

If the system does not reach the end of tape during the partition save, MAGSAV reads the continuation tape unit number, as calculated in the above program, in response to the Name or command prompt. The system rejects this number as an invalid response, and issues a reprompt, to which it reads the command \$Q to terminate the current logical tape. The next partition save will commence at the point on the tape where the previous save terminated.

In either case, the save number is incremented only when the next partition is saved.

More complex CPL programs may be written to generate tape unit numbers in some other order, for example, from a list. Note that due to the limit on the size of a partition, a partition save would not normally continue onto a third 8mm tape.

MAGSAV/RST MESSAGES

This appendix contains two types of messages that you might see displayed on the screen when running MAGSAV/RST. The first section lists error and warning messages in order of message number (DRB-*nnnnn*). The second section lists informative messages that are not associated with a message number but are usually displayed in conjunction with one or more of the error or warning messages.

Error and Warning Messages

Fatal Error from DRB-FSR (DRB-10601):

No free BLOCK BUFFERS *procedure name*

A fatal error occurred during a restore operation. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeServiceSM for help.

Fatal Error from DRB-FSR (DRB-10602):

Unexpected code *code* from external procedure *error proc name*
(detected by procedure *proc name*)

A fatal error occurred during a restore operation. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

Error from DRB-FSR (DRB-10603):

Peripheral Interface Error. *DRB error text*

A peripheral interface error occurred during a save/restore operation. *DRB error text* describes the error. The operation aborts. If the cause of the error is not apparent, refer to PrimeService for help.

Fatal Error from DRB-FSR (DRB-10604):

Unexpected code *code* from internal procedure *error proc name*
(detected by procedure *proc name*)

A fatal error occurred during a restore operation. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

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Error from DRB-FSR (DRB-10605):

Media Labelling Error. DRB error text

A media labelling error occurred during a save/restore operation. *DRB error text* describes the error. The operation aborts. If the cause of the error is not apparent, refer to PrimeService for help.

Warning from DRB-FSR (DRB-10606):

Tape format invalid - block type *block type* followed by block type *block type*.

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Warning from DRB-FSR (DRB-10607):

Tape format invalid - incorrect block sequence number.

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Warning from DRB-FSR (DRB-10608):

Inconsistent block type *block type* detected by procedure *procedure name*.

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Warning from DRB-FSR (DRB-10609):

Failed to identify object descriptor (procedure *procedure name*).

Some data cannot be restored. The tape is positioned forward and the restore operation continued. This is an internal error; if the cause is not apparent, refer to PrimeService for help.

Fatal Error from DRB-FSR (DRB-10610):

Fatal error in common block. (procedure *procedure name*).

A fatal error occurred during a restore operation. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

Warning from DRB-FSR (DRB-10611):

Illegal tape format encountered. (procedure *procedure name*).

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation cross-functionalcontinued.

Warning from DRB-FSR (DRB-10612):

Invalid state *state* detected in procedure *procedure name*.

Some data cannot be restored. The tape is positioned forward and the restore operation continued. This is an internal error; refer to PrimeService for help.

Warning from DRB-FSR (DRB-10613):

Invalid state pair (*state* , *state*) detected in procedure *procedure name*.

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Fatal Error from DRB-FSR (DRB-10614):

Bad Parameter Passed (procedure *procedure name*).

A fatal error occurred during a save/restore operation. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

Error from DRB-FSR (DRB-10615):

Unrecoverable tape read error - cannot continue restore

An unrecoverable tape read error occurred during a restore operation. This may happen, for example, when a read error occurs near the end of a logical tape. The restore aborts.

Warning from DRB-FSR (DRB-10616):

Media Labelling Error. *DRB error text (routine name)*

A media labelling error occurred during a save operation. *DRB error text* describes the error. The save continues. If the cause of the error is not apparent, refer to PrimeService for help.

Warning from DRB-FSR (DRB-10617):

Peripheral Interface Error. *DRB error text (routine name)*

A peripheral interface error occurred during a save operation. *DRB error text* describes the error. The save continues. If the cause of the error is not apparent, refer to PrimeService for help.

Error from DRB-FSR (DRB-10618):

Media Labelling Error. *DRB error text (routine name)*

A media labelling error occurred during a save operation. *DRB error text* describes the error. The save aborts. If the cause of the error is not apparent, refer to PrimeService for help.

Error from DRB-FSR (DRB-10619):

Peripheral Interface Error. *DRB error text (routine name)*

A peripheral interface error occurred during a save operation. *DRB error text* describes the error. The save aborts. If the cause of the error is not apparent refer to PrimeService for help.

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Error from DRB-FSR (DRB-10621):

Unable to read input data : *PRIMOS error text*.

An error occurred attempting to read the input data. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10622):

A warm start has occurred. Some data may have been lost.
Restarting save from last checkpoint.

A warning occurred because warm start executed during the save operation. The save restarted and is valid from the last checkpoint; some data between the last checkpoint and the previous checkpoint may have been lost.

Warning from DRB-FSR (DRB-10623):

Internal state data error in : *proc name*

Some data cannot be restored. The tape is positioned forward and the restore operation continued. This is an internal error; if the cause is not apparent, refer to PrimeService for help.

Warning from DRB-FSR (DRB-10624):

Unexpected state *current state* and get request *call type*
(detected by procedure *proc name*).

Some data cannot be restored. The tape is positioned forward and the restore operation continued. This is an internal error; if the cause is not apparent, refer to PrimeService for help.

Warning from DRB-FSR (DRB-10625):

Unexpected call type detected in internal procedure *proc name*

Some data cannot be restored. The tape is positioned forward and the restore operation continued. This is an internal error; if the cause is not apparent, refer to PrimeService for help.

Warning from DRB-FSR (DRB-10626):

PRIMOS error text Opening *pathname*

An error occurred during a save/restore operation when opening a file. *PRIMOS error text* describes the error. *pathname* gives the name of the file.

Warning from DRB-FSR (DRB-10627):

PRIMOS error text Attaching to *pathname*

An error occurred during a save/restore operation when attaching to a directory.
PRIMOS error text describes the error. *pathname* gives the name of the directory.

Warning from DRB-FSR (DRB-10628):

Bad directory password. Attaching to *pathname*

Wrong password used when attaching to a password directory. *pathname* gives the name of the directory.

Warning from DRB-FSR (DRB-10629):
Bad pathname. Attaching to *pathname*
Illegal pathname encountered when attaching to a directory. *pathname* gives the name of the directory.

Warning from DRB-FSR (DRB-10630):
Unable to allocate storage. DTB will not be set :
PRIMOS error text
When running a true incremental save, MAGSAV needs to temporarily store the the object pathnames and DTB (date and time backed up). The system has failed to assign an area for the storage of these parameters. *PRIMOS error text* describes the error. The save continues, but DTB is not set on any object.

Warning from DRB-FSR (DRB-10631):
PRIMOS error text while setting dtb on *pathname*
An error occurred during a save operation when setting the DTB (date and time backed up) on an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object. The object is saved but its DTB is not updated.

Warning from DRB-FSR (DRB-10632):
PRIMOS error text while setting dumped bit on *pathname*
An error occurred during a save operation when setting the dumped bit on an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object. The object is saved but its dumped bit is not set.

Warning from DRB-FSR (DRB-10633):
Unable to attach to *pathname* : *PRIMOS error text*
An error occurred during a save operation when attaching to a directory. *PRIMOS error text* describes the error. *pathname* gives the name of the directory. The directory is not saved.

Warning from DRB-FSR (DRB-10634):
Unable to open parent directory of *object name* :
PRIMOS error text
An error occurred during a save operation when opening the parent directory of an object. *PRIMOS error text* describes the error. *object name* gives the name of the object. The entry is not saved.

Warning from DRB-FSR (DRB-10635):
PRIMOS error text while reading *object name*
An error occurred during a save operation when reading the entries in a directory. *PRIMOS error text* describes the error. *object name* gives the name of the directory entry. The object is not saved.

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Fatal Error from DRB-FSR (DRB-10636):
Home attach point has moved from *from path*
to *to path* (procedure *proc name*).

A fatal error occurred during a restore operation when attaching to the home directory. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

Warning from DRB-FSR (DRB-10637):
Home attach point has moved from *from path*
to *to path*

This error occurs when a restore operation is interrupted, for example, by entering QUIT. The home attach point has changed. The operation is suspended so that you can reattach to your home attach point.

Warning from DRB-FSR (DRB-10638):
PRIMOS error text Writing to *pathname*

An error occurred when writing to a file during a restore operation. *PRIMOS error text* describes the error. *pathname* gives the name of the file. The restore continues.

Fatal Error from DRB-FSR (DRB-10639):
Invalid current save type *save type* detected by *proc name* .

A fatal error occurred during a restore operation. The system cannot recognize the save on tape as being either a base or an incremental save. The operation aborts. Some data may have been restored. Files may be left open. This is an internal error; refer to PrimeService for help.

Warning from DRB-FSR (DRB-10640):
PRIMOS error text Setting attributes in directory entry for *pathname*

An error occurred during a restore operation when setting the attributes for an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object. The restore continues.

Warning from DRB-FSR (DRB-10641):
PRIMOS error text Processing *pathname* *pathname*

An error occurred during a save operation when processing an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10642):
Unable to allocate memory (*routine name*)

The system cannot assign the memory that it needs for a save operation.

Warning from DRB-FSR (DRB-10643):
PRIMOS error text Setting DTM in directory entry for *pathname*

An error occurred during a restore operation when setting the DTM (date and time modified) attribute for an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10644):

PRIMOS error text Setting CAM minimum extent for *pathname*

An error occurred during a restore operation when assigning storage space on disk for a CAM file that is being restored from tape. *PRIMOS error text* describes the error. *pathname* gives the name of the file.

Warning from DRB-FSR (DRB-10645):

PRIMOS error text Setting segment directory size for *pathname*

An error occurred during a restore operation when setting the number of entries for a segment directory. *PRIMOS error text* describes the error. *pathname* gives the name of the directory.

Warning from DRB-FSR (DRB-10646):

Tape data invalid.

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. Further details of the error are given in subsequent messages.

Warning from DRB-FSR (DRB-10647):

PRIMOS error text while opening *object name*

An error occurred during a save operation when opening an object on disk. *PRIMOS error text* describes the error. *object name* gives the name of the object. The object is not saved.

Warning from DRB-FSR (DRB-10648):

PRIMOS error text while reading access for *object name*

An error occurred during a save operation when reading the ACL protection of an object. *PRIMOS error text* describes the error. *object name* gives the name of the object. The object is saved without ACL protection.

Error from DRB-FSR (DRB-10649):

Reel not currently positioned to a logical tape.

An error occurred because the logical tape requested could not be found. Rewind the tape or mount the next tape.

Warning from DRB-FSR (DRB-10650):

PRIMOS error text while reading *object pathname*

An error occurred during a save operation when reading a SAM, DAM, or CAM file. *PRIMOS error text* describes the error. *object pathname* gives the name of the file. The file is not completely saved.

Warning from DRB-FSR (DRB-10651):

PRIMOS error text Positioning in the segment directory to entry *object pathname*

An error occurred during a restore operation when positioning to an entry of a segment directory. *PRIMOS error text* describes the error. *object pathname* gives the name of the object.

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Warning from DRB-FSR (DRB-10652):
Segment directory entry not found. Positioning in the segment directory to entry *object pathname*

A segment directory entry cannot be found during a restore operation. *object pathname* gives the name of the next entry that is restored.

Warning from DRB-FSR (DRB-10653):
PRIMOS error text Opening segment directory entry *object pathname*

An error occurred during a restore operation when opening a segment directory entry. *PRIMOS error text* describes the error. *object pathname* gives the name of the entry where the error occurred. The restore continues with the next object to be restored.

Warning from DRB-FSR (DRB-10654):
Failed to restore segment directory entry *object pathname*

A segment directory entry has not been restored. The reason is given in a previous message. *object pathname* gives the name of the entry.

Warning from DRB-FSR (DRB-10655):
Unrecoverable tape read error - failed to read one or more tape blocks.

Unrecoverable tape read error. Some data cannot be restored. The tape is positioned forward and the restore continued.

Warning from DRB-FSR (DRB-10656):
Failed to invoke ROAM (ROAM error code *roam error code*).

During a restore operation, the system has failed to run the ROAM subsystem. ROAM files are not saved/restored. Check that ROAM is installed and shared. Refer to the ROAM log file for more information. See your System Administrator for information on ROAM.

Warning from DRB-FSR (DRB-10657):
object pathname contains password directories. Password directories not supported for ROAM slaves.

During a restore operation you have attempted to use a password directory for a ROAM slave file. See your System Administrator for information on ROAM.

Warning from DRB-FSR (DRB-10658):
object pathname already exists.

This error occurs during a restore operation when the system cannot restore a file because of the existence of a disk file of the same name. *object pathname* gives the name of the existing disk object. This error may occur when restoring ROAM files.

Warning from DRB-FSR (DRB-10659):
PRIMOS error text Checking existence of *pathname*

An error occurred during a restore operation when checking the existence of an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object. This error may arise if you have insufficient access rights to the object.

Warning from DRB-FSR (DRB-10660):

PRIMOS error text while reading extent map for *object pathname*

When MAGSAV saves a CAM file, it also saves the extent map for this file. When this error occurs, the file is saved, but not the extent map for the file. When you restore the file, it will have the default extent size. *PRIMOS error text* describes the error. *object pathname* gives the name of the file.

Warning from DRB-FSR (DRB-10661):

PRIMOS error text Creating *pathname*

An error occurred during a restore operation when restoring an object. *PRIMOS error text* describes the error. *pathname* gives the name of the file. This error may occur if you have insufficient access rights.

Warning from DRB-FSR (DRB-10662):

PRIMOS error text while reading subfile: *subfile no* of *object name*

An error occurred during a save operation when reading a segment directory subfile. *PRIMOS error text* describes the error. *object name* gives the name of the segment directory.

Warning from DRB-FSR (DRB-10663):

PRIMOS error text while positioning in *object name*

An error occurred during a save operation when attempting to position within a segment directory. *PRIMOS error text* describes the error. *object name* gives the name of the segment directory.

Error from DRB-FSR (DRB-10665):

Limit on reposition attempts reached.

A sequence of tape errors and subsequent attempts to reposition the tape occurred during a restore operation. Each attempt has failed. The limit on the number of errors/attempts has now been reached. The restore aborts. Some data may have been restored.

Warning from DRB-FSR (DRB-10666):

Unspecified ROAM error.

A ROAM error occurred during a restore operation. Refer to the ROAM log file for more information. See your System Administrator for information on ROAM.

Warning from DRB-FSR (DRB-10667):

PRIMOS error text Creating/replacing ACAT *object pathname*

An error occurred during a restore operation when creating or replacing an access category. *PRIMOS error text* describes the error. *object pathname* gives the name of the access category.

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Warning from DRB-FSR (DRB-10668):

Failed to register ROAM segment directory completion (ROAM error code
roam error code) restoring pathname

An error occurred during a restore operation when notifying ROAM that a segment directory has been successfully restored. The ROAM file concerned is not restored correctly. Refer to the ROAM log file for more information.

Warning from DRB-FSR (DRB-10669):

PRIMOS error text while setting read-write lock on object name

When MAGSAV saves a ROAM master file, it first has to set the read/write lock (RWLOCK) on the file to EXCLUSIVE. This prevents other users from attempting to write to one of the slave files during the save. The lock-setting operation has failed. PRIMOS error text describes the error. object name gives the name of the master file. The file is not saved.

Fatal Error from DRB-FSR (DRB-10670):

PRIMOS error text attaching home.

A fatal error occurred during a save/restore operation when attaching to the home directory. This may happen if, for example, the operation is interrupted or terminates abnormally. The operation aborts. Some data may have been saved/restored. Files may be left open.

Warning from DRB-FSR (DRB-10671):

PRIMOS error text while resetting read-write lock on pathname

After saving a ROAM file, MAGSAV attempts to reset the read/write lock (rwlock) back to its previous setting. This operation has failed and the rwlock will remain as EXCLUSIVE. PRIMOS error text describes the error. pathname gives the name of the file.

Warning from DRB-FSR (DRB-10672):

PRIMOS error text locating ROAM slave object pathname

An error occurred during a save operation when attempting to find one of the slave files associated with a ROAM master segment directory. The save of the ROAM file is incomplete. No further slave files belonging to this master are saved. PRIMOS error text describes the error. object pathname gives the name of the file.

Warning from DRB-FSR (DRB-10673):

PRIMOS error text while opening ROAM slave object pathname.

An error occurred during a save operation when attempting to open one of the slave files associated with a ROAM master segment directory. The save of the ROAM file is incomplete. No further slave files belonging to this master are saved. PRIMOS error text describes the error. object pathname gives the name of the file.

Warning from DRB-FSR (DRB-10674):

Failed to restore contents of directory directory pathname

The contents of a directory have not been restored. The reason is given in a previous message. directory pathname gives the name of the directory.

Warning from DRB-FSR (DRB-10675):

Failed to restore *object pathname*

An object has not been restored. The reason is given in a previous message. *object pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10676):

Corrupt tape block (block sequence number *block seq no* of save).

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Warning from DRB-FSR (DRB-10677):

Missing tape block (following block sequence number *block seq no* of save).

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued.

Warning from DRB-FSR (DRB-10678):

PRIMOS error text Adding *object path* to access category *acat name*

An error occurred during a restore operation when adding an object to an access category. *PRIMOS error text* describes the error. *object path* gives the name of the object. *acat name* gives the name of the access category.

Error from DRB-FSR (DRB-10679):

End of save reached following tape error.

An error occurred during a restore operation. The attempted positioning forward of the tape following a tape error caused the end of the data on tape to be reached. Some data may have been restored.

Warning from DRB-FSR (DRB-10680):

PRIMOS error text Setting passwords on directory *directory pathname*

An error occurred during a restore operation when setting the password on a restored directory. *PRIMOS error text* describes the error. *directory pathname* gives the name of the directory. The directory is restored with default protection.

Warning from DRB-FSR (DRB-10681):

PRIMOS error text Setting maximum quota on directory *directory pathname*

An error occurred during a restore operation when setting the maximum quota on a directory. *PRIMOS error text* describes the error. *directory pathname* gives the name of the directory.

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Warning from DRB-FSR (DRB-10682):

Corrupt data detected restoring *destination pathname*

The tape data is corrupt, and some data cannot be restored. This may be due to a problem with MAGSAV. The tape is positioned forward and the restore operation continued. *destination pathname* gives the name of the object where the error occurred.

Warning from DRB-FSR (DRB-10683):

PRIMOS error text Writing ACL for *destination pathname*

An error occurred during a restore operation when writing the ACL protection for an object. *PRIMOS error text* describes the error. *destination pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10684):

Unrecognised segment directory entry type *type* for entry *subent pathname*

An error occurred during a restore operation when restoring a segment directory. The PRIMOS file type (for example, SAM, DAM) of an existing segment directory on disk is invalid. The effect of this is reported in subsequent messages.

Error from DRB-FSR (DRB-10685):

Error recovery has failed. *object pathname* was not opened.

An error occurred when the system restarted a save operation after an unrecoverable write error. The object to be saved when restarting was not open. *object pathname* gives the name of the object. The save aborts.

Error from DRB-FSR (DRB-10686):

Error recovery has failed. An illegal block type was specified (*PRIMOS error text*).

An error occurred when the system restarted a save operation after an unrecoverable write error. MAGSAV has encountered an unexpected tape block type as the first block to be written to tape. *PRIMOS error text* gives the type of tape block found.

Error from DRB-FSR (DRB-10687):

PRIMOS error text Getting current attach point.

An error occurred while attempting to identify the current attach point. *PRIMOS error text* describes the error.

Error from DRB-FSR (DRB-10689):

PRIMOS error text Attaching to home directory.

An error occurred during a restore operation when attaching to the home directory. Some data may have been restored. *PRIMOS error text* describes the error. The restore aborts.

Error from DRB-FSR (DRB-10690):

PRIMOS error text Getting home attach point.

An error occurred during a restore operation when evaluating the home directory pathname. Some data may have been restored. *PRIMOS error text* describes the error. The restore aborts.

Error from DRB-FSR (DRB-10691):

PRIMOS error text Getting home directory type.

An error occurred during a restore operation when evaluating the home directory type (for example, ACL or password). Some data may have been restored. *PRIMOS error text* describes the error. The restore aborts.

Fatal Error from DRB-FSR (DRB-10692):

PRIMOS error text Attaching to *pathname*

A fatal error occurred during a restore operation when attaching to a directory. The operation aborts. Some data may have been restored. Files may be left open. *PRIMOS error text* describes the error.

Fatal Error from DRB-FSR (DRB-10693):

PRIMOS error text Attaching to home directory.

A fatal error occurred during a restore operation when attaching to the home directory. The operation aborts. Some data may have been restored. Files may be left open. *PRIMOS error text* describes the error.

Fatal Error from DRB-FSR (DRB-10694):

PRIMOS error text Getting home attach point.

A fatal error occurred after a restore operation when evaluating the pathname of the home directory. The operation aborts. Some data may have been restored. Files may be left open. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10695):

Restore Abandoned.

The restore operation has been abandoned. The reason is given in previous messages.

Error from DRB-FSR (DRB-10696):

PRIMOS error text Getting user input.

An error occurred when the system attempted to obtain information that you entered from the terminal. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10697):

Unable to allocate memory (*PRIMOS error text*).

RWLOCK of *filename* will not be reset on error.

An error occurred during a save operation of a ROAM file. MAGSAV has failed to allocate memory for storing the read/write lock (rwlock) of a ROAM master file. *PRIMOS error text* describes the error. *filename* gives the name of the file. You may need to manually reset the rwlock.

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Warning from DRB-FSR (DRB-10698):
RWLOCK will not be reset.

This message is displayed as a result of a previously reported error during the save of a ROAM file.

Error from DRB-FSR (DRB-10699):

PRIMOS error text Pathname: *pathname*

An error occurred during a save/restore operation when processing a file. *PRIMOS error text* describes the error. *pathname* gives the name of the file.

Warning from DRB-FSR (DRB-10702):

PRIMOS error text Positioning to the end of file *pathname*

An error occurred during a restore operation when positioning to the end of a file. *PRIMOS error text* describes the error. *pathname* gives the name of the file.

Warning from DRB-FSR (DRB-10703):

Unable to open index file : *PRIMOS* error text

An error occurred during a restore operation when using the \$I subcommand to generate an index of the operation. The index file cannot be opened. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10704):

Unable to attach to index pathname : *PRIMOS* error text

An error occurred during a restore operation when using the \$I subcommand to generate an index of the operation. The system cannot attach to the index pathname. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10705):

Unable to close previous index : *PRIMOS* error text

An error occurred during a restore operation when using the \$I subcommand to generate an index of the operation. The previous index file cannot be closed. *PRIMOS error text* describes the error.

Error from DRB-FSR (DRB-10706):

Option no longer supported: "-P300".

MAGSAV no longer supports this option.

Error from DRB-FSR (DRB-10707):

Option no longer supported: "-7TRK".

MAGSAV no longer supports this option.

Error from DRB-FSR (DRB-10708):

Option no longer supported: "-CAM_TO_DAM".

MAGSAV no longer supports this option.

Error from DRB-FSR (DRB-10709):
Invalid command line.

The syntax of the command line you entered to invoke MAGSAV or MAGRST is invalid.

Error from DRB-FSR (DRB-10710):
-SAVE_UFD may only be used with -INC.

The MAGSAV option -SAVE_UFD may only be used when you are running incremental saves.

Error from DRB-FSR (DRB-10711):
-REV19, -REV20 and -BOOT are mutually exclusive.

The MAGSAV options -REV19, -REV20 and -BOOT cannot be used simultaneously in the command line.

Error from DRB-FSR (DRB-10712):
-QUERY can only be used with an ANSI tape.

You have tried to use the MAGSAV option -QUERY when writing a tape in non-ANSI format.

Error from DRB-FSR (DRB-10713):
-LABEL can only be used with an ANSI tape.

You have tried to use the MAGSAV option -LABEL when writing a tape in non-ANSI format.

Error from DRB-FSR (DRB-10714):
-UPDT is restricted to users in the .BACKUP\$ group.

You must be a member of the ACL group .BACKUP\$ to use the MAGSAV option -UPDT or else you must invoke MAGSAV from the supervisor terminal.

Error from DRB-FSR (DRB-10715):
-NO_DTA is restricted to users in the .BACKUP\$ group.

You must be a member of the ACL group .BACKUP\$ to use the MAGSAV option -NO_DTA, or else you must invoke MAGSAV from the supervisor terminal.

Fatal Error from DRB-FSR (DRB-10716):
Failed to get continuation reel device details.

You have not entered the tape unit number for the continuation reel during a save/restore operation.

Fatal Error from DRB-FSR (DRB-10717):
Failed to position continuation reel.

A fatal error occurred when attempting to position to the start of a continuation reel during a save/restore operation. The tape data may be corrupt or there may be an error on the tape unit. The operation aborts. Files may be left open.

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Warning from DRB-FSR (DRB-10718):
PRIMOS error text Getting user input.

An error occurred when the system attempted to obtain information entered from the terminal.

Warning from DRB-FSR (DRB-10719):
pathname is not a valid PRIMOS pathname.

You have entered an invalid pathname. Refer to the Prime User's Guide for details on pathnames.

Warning from DRB-FSR (DRB-10720):
Bad ATTACH: PRIMOS error text
pathname (AT\$)

An error occurred during a save/restore operation when attempting to attach to a directory. PRIMOS error text describes the error. pathname gives the name of the directory.

Error from DRB-FSR (DRB-10721):
PRIMOS routine GETID\$ failed - PRIMOS error text

An error occurred during a save/restore operation when checking your user access rights. PRIMOS error text describes the error.

Error from DRB-FSR (DRB-10722):
An unrecoverable disk read error occurred.

A physical disk error occurred during a save operation. The save is aborted. Run FIX_DISK to repair the disk.

Warning from DRB-FSR (DRB-10723):
Failed to attach home: PRIMOS error text (AT\$HOM)

An error occurred when attaching to the home directory during a save/restore operation. PRIMOS error text describes the error.

Warning from DRB-FSR (DRB-10724):
File type of existing file does not match file being restored -
restoring pathname

When you restore an incremental save tape, the file types (for example, SAM, DAM), must match. The system has attempted to restore a file whose type does not match that of the existing file on disk.

Warning from DRB-FSR (DRB-10725):
PRIMOS error text Opening parent directory of object pathname

An error occurred during a restore operation when opening the parent directory of an object. PRIMOS error text describes the error. pathname gives the name of the object.

Warning from DRB-FSR (DRB-10726):

PRIMOS error text Searching parent directory for object *pathname*

An error occurred during a restore operation when searching the parent directory for an object. *PRIMOS error text* describes the error. *pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10727):

PRIMOS error text Truncating file *object pathname*

An error occurred during a restore operation when truncating a file. *PRIMOS error text* describes the error. *object pathname* gives the name of the object.

Warning from DRB-FSR (DRB-10728):

PRIMOS error text Getting segment directory size for *pathname*

An error occurred during a restore operation when retrieving the number of entries of a segment directory. *PRIMOS error text* describes the error. *pathname* gives the name of the directory.

Warning from DRB-FSR (DRB-10729):

PRIMOS error text Deleting segment directory entry *object pathname*

An error occurred during a restore operation when deleting an entry in a segment directory. *PRIMOS error text* describes the error. *object pathname* gives the name of the directory entry.

Warning from DRB-FSR (DRB-10730):

Unrecoverable tape write error.

An unrecoverable tape write error occurred during a save operation. MAGSAV makes 20 attempts to write to the tape. If these are unsuccessful, the program truncates the current tape and prompts you for a new reel.

Warning from DRB-FSR (DRB-10731):

PRIMOS error text Getting a temporary file in directory *directory path*

An error occurred during a restore operation when creating a temporary file in a directory. *PRIMOS error text* describes the error. *directory path* gives the name of the directory.

Warning from DRB-FSR (DRB-10732):

PRIMOS error text Replacing active EPF *EPF pathname*

An error occurred during a restore operation when restoring an active EPF from tape. *PRIMOS error text* describes the error. *EPF pathname* gives the name of the EPF.

Warning from DRB-FSR (DRB-10733):

PRIMOS error text Checking if file is an active EPF: *file pathname*

An error occurred during a restore operation, when checking if an EPF is currently running. *PRIMOS error text* describes the error. *file pathname* gives the name of the file.

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Warning from DRB-FSR (DRB-10735):

PRIMOS error text Attaching back to home directory.

An error occurred during a restore operation when attaching to the home directory. Some data may have been restored. *PRIMOS error text* describes the error.

Error from DRB-FSR (DRB-10738):

ROAM error *roam error code* deleting *pathname*

An error occurred when restoring a ROAM file of the same name as an existing ROAM file on disk. The file on disk cannot be deleted. Refer to the ROAM log file for more information. See your System Administrator for information on ROAM.

Error from DRB-FSR (DRB-10739):

Option no longer supported: "-CAM_RBF".

MAGRST no longer supports this option.

Error from DRB-FSR (DRB-10740):

Option no longer supported: "-DAM_RBF".

MAGRST no longer supports this option.

Error from DRB-FSR (DRB-10741):

PRIMOS routine ERKL\$\$ failed: PRIMOS error text .

An error occurred during a save/restore operation when the system checks the kill character in use on your terminal. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10742):

PRIMOS error text while reading BOOT. This tape will not contain a boot record.

An error occurred during a save operation when using the options -REV19, -REV20, or -BOOT. The tape created does not contain a boot program, and cannot be used for booting from tape.

Error from DRB-FSR (DRB-10743):

PRIMOS error text Allocating memory from user-class dynamic storage.

An error occurred during a save/restore operation when the system attempted to temporarily assign an area of memory . *PRIMOS error text* describes the error.

Error from DRB-FSR (DRB-10744):

PRIMOS error text Returning allocated memory to user-class dynamic storage.

An error occurred during a save/restore operation when the system attempted to release an area of memory that was previously assigned for use. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10748):

Pathname is too long. Maximum 128 characters. *pathname*

The pathname you have entered on the terminal is too long. Attach to a directory level below that to which you are currently attached and reenter the pathname.

Fatal Error from DRB-FSR (DRB-10749):

Invalid index type *index type* detected by *proc name* .

A fatal error occurred during a save/restore operation when using the \$I subcommand to generate an index of the save/restore operation. The operation aborts. Files may be left open. This is an internal error; refer to PrimeService for help.

Warning from DRB-FSR (DRB-10750):

PRIMOS error text Writing to index file.

An error occurred during a save/restore operation when using the \$I subcommand to generate an index of the save/restore operation. *PRIMOS error text* describes the error. The operation continues.

Error from DRB-FSR (DRB-10751):

Current attach point is the root.

An error occurred because you are currently attached to the root and MAGSAV/MAGRST cannot be executed while attached to Root.

Fatal Error from DRB-FSR (DRB-10752):

Unrecoverable error following PRIMOS session.

A fatal error occurred during a restore operation. A previous message gives details of the error. The operation aborts. Some data may have been restored. Files may be left open.

Fatal Error from DRB-FSR (DRB-10753):

PRIMOS error text Getting current attach point.

A fatal error occurred during a restore operation when evaluating the pathname of the current attach point. Some data may have been restored. The operation aborts. Files may be left open. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10756):

Restoring a list and the following objects were not found:

This message is displayed after a partial restore. It is followed by a list of pathnames.

Warning from DRB-FSR (DRB-10757):

Unrecoverable tape read error.

MAGRST continues the restore, but some records are not restored.

Warning from DRB-FSR (DRB-10758):

-VAR is no longer supported. Option ignored.

The operation continues.

Warning from DRB-FSR (DRB-10759):

-LONG is no longer supported. Option ignored.

The operation continues.

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Warning from DRB-FSR (DRB-10760):
Invalid asynchronous read status *object pathname*.
Status was *status code*

A warning occurred during a save operation. MAGSAV could not read the object identified by *object pathname*. *status code* describes the problem.

Fatal error from DRB-FSR (DRB-10761):
error code while calling *synchproc name* from *DRB proc name*

A fatal error occurred when a DRB procedure *DRBproc name* attempted to call a PRIMOS synchronous procedure *synchproc name*. *error code* describes the error.

Warning from DRB-FSR (DRB-10762):
Directory *pathname* is a mount point.
Cannot restore mount points.

A warning occurred during a restore operation. The directory identified by *pathname* could not be restored because it is a mount point.

Warning from DRB-FSR (DRB-10764):
PRIMOS error text While closing distribution log.

A PRIMOS problem occurred while attempting to close the DRB distribution log. *PRIMOS error text* describes the problem.

Warning from DRB-FSR (DRB-10766):
PRIMOS error text setting *local variable*

A problem occurred during a save operation. *PRIMOS error text* describes the problem. *local variable* indicates where the problem occurred; it denotes a tape unit, a volume identifier, or a save number.

Error from DRB-FSR (DRB-10767):
-REV19 and -BOOT are mutually exclusive.

An error occurred because both options were specified on the command line for the DRB operation. Correct the command line and restart.

Warning from DRB-FSR (DRB-10768):
Extended Index does NOT support REV19 and
REV20 format tape.

A warning occurred because the extended index feature is not available with Rev. 19 or Rev 20 format tapes.

Warning from DRB-FSR (DRB-10769):
PRIMOS error text while truncating the index file.
Some files may be indexed twice.

A warning occurred during truncation of the index file. *PRIMOS error text* describes the problem.

Warning from DRB-FSR (DRB-10770):
Unable to truncate the index at checkpoint *checkpoint*.
Index entries following this checkpoint are invalid

A warning occurred while indexing a save or restore operation to a file. The index process was turned off after *checkpoint*.

Warning from DRB-FSR (DRB-10771):
Error occurred while writing to index file.
Indexing turned off.

A warning occurred because of failure to write to the index file during a save or restore operation. The indexing operation was turned off.

Warning from DRB-FSR (DRB-10772):
Error occurred while truncating the index file.

A warning occurred because of an error during writing to the index file. The indexing operation was turned off.

Warning from DRB-FSR (DRB-10773):
Restore from checkpoint list not completed.
Some objects have not been restored.

A warning occurred because the process failed to reach the end of the checkpoint list. The restore is incomplete.

Warning from DRB-FSR (DRB-10774):
Index could not be created in the index library.
PRIMOS error text
Creating index in alternative directory as defined
in the DRB config file

A warning occurred because the condition described by *PRIMOS error text* prevented creation of the index file in the index library. The index was created in the alternative directory listed in DRB*>CONFIG_FILE.

Error from DRB-FSR (DRB-10775):
You cannot use the -INDEX_LIBRARY option in conjunction
with either the -REV19 or -REV20 options.

An error occurred because indexing is valid only at Rev. 21.0 and later.

Error from DRB-FSR (DRB-10776):
No pathname supplied on command line with -INDEX_LIBRARY option and
the DRB config file could not be read to find an index library pathname.
PRIMOS error text

An error occurred because the process was unable to read DRB*>CONFIG_FILE to get the pathname for the index library, and it was not specified on the command line. *PRIMOS error text* describes the error.

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Error from DRB-FSR (DRB-10777):

No pathname supplied on command line with `-INDEX_LIBRARY` option and the DRB config file also contained no index library pathname.

PRIMOS error text.

An error occurred because the index library pathname was not specified either in `DRB*>CONFIG_FILE` or on the command line.

Warning from DRB-FSR (DRB-10780):

Failed to delete obsolete index files in index library.

Index library may now be in an inconsistent state

PRIMOS error text.

A warning occurred because obsolete index files could not be deleted. *PRIMOS error text* describes the error.

Warning from DRB-FSR (DRB-10781):

The tape being restored has no label.

`-INDLIB` can only be used with labelled tapes.

Indexing turned off.

A warning occurred because `MAGRST` requires a labelled tape in order to perform indexing.

Informative Messages

Bad ROAM slave pathname encountered.

This is an informative message following a previous message during the restore of a ROAM file. See your System Administrator for information on ROAM.

Continuing restore - next object is : *pathname* ...

Informative message that is displayed during a restore operation after repositioning the tape following a tape error. *pathname* gives the name of the next object to be restored.

Continuing restore ...

Informative message displayed following some user interaction during a restore operation. This message often appears in conjunction with an unrecoverable tape read error message.

Enter new ROAM slave pathname for: *pathname*

Prompts you for an alternative ROAM slave pathname when restoring a ROAM file.

*** Invalid response - enter "YES" or "NO" please.

You should have entered YES or NO to the previous system prompt.

Last object successfully restored was : *pathname*

Informative message that is displayed after repositioning the tape following a tape error. *pathname* gives the name of the last object restored.

No objects have been restored so far . . .

Informative message that is displayed during a restore operation after repositioning the tape following a tape error.

Object *object name* is not a valid decimal integer. *command name*

An error occurred because the procedure *command name* expected a decimal integer to indicate the number of levels to be indexed. Instead, the command line contained *object name*.

Object *object name* is not a valid treename. *command name*

An error occurred because the procedure *command name* expected a valid pathname for the index library. Instead, the command line contained *object name*.

Ok to overwrite *pathname* :

A system prompt that is displayed during a restore operation requesting you to confirm whether or not you wish the system to overwrite an existing file on disk. This prompt may be displayed if you are restoring ROAM files. See your System Administrator for information on ROAM.

Overwriting active EPF *pathname* . . .

Informative message displayed during a restore operation to warn you that an EPF that is currently in use is being restored. *pathname* gives the name of the EPF.

Repositioning following tape error . . .

This is an informative message that is displayed during a restore operation after a tape error occurred. The tape is being positioned forward in an attempt to continue the restore.

pathname

Informative message displays each pathname saved or restored during the procedure.

Tape repositioned successfully. Some data has been lost.

This is an informative message that is displayed during a restore operation after the tape has been positioned forward following a tape error. Some data has been lost. The restore continues.

You are not attached to an MFD.

This is an informative message that is displayed during a restore operation. The operation continues.

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