

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

SpoolOrganizer provides the following commands to archive spool entries from the Online Database to an external media:

<b>ARCOLE</b>	Archive to Tape or ARCFILE
<b>ARCARCFDTA</b>	Move ARCFILE to Tape
<b>OPTOLE</b>	Archive to Optical Disk or ARCFILE
<b>OPTARCFDTA</b>	Move ARCFILE to Optical Disk

The user must be defined as a SpoolOrganizer operator or security officer to use the Archive commands.

An **ARCFILE** is a sequential physical file with record length **4096**. SpoolOrganizer can archive spool entries to an **ARCFILE**, then write the **ARCFILE** member to tape or Optical at a later time. All commands can optionally write a record of each archived spool entry to the Archive or Optical Catalog. Users can query these catalogs to access the archived spool entries. For more information, refer to Chapter 24, "Search for Spool Entries".

All commands can be placed in a CL program and/or submitted to batch. All commands send an escape message **SPO-1000** if an error is detected. The message can be monitored by a CL program. The user can select the spool entries to archive or purge by specifying an **ARCID**.

## *Archive Online Database to Tape*

The **ARCOLE** command is used to archive spool entries in the Online Database. The archive command will create a file on the archive media that can be displayed at a later date. For more information, refer to Chapter 18, "Display Archived Media Selections". Following is the screen and parameters of the **ARCOLE** command.

# SPOOLORGANIZER/400™

```

Archive Spool Entries (ARCOLE)

Type choices, press Enter.

Selection Specifications . . . . . _____ Name, *ALL
Device . . . . . _____ Name, *ARCFILE
      + for more values _____
Volume Identifier . . . . . *MOUNTED Character value, *MOUNTED
      + for more values _____
File label on tape . . . . . *GENERATE
Tape sequence number . . . . . *END Number, *END
End of tape option . . . . . *REWIND *REWIND, *LEAVE, *UNLOAD
Archive expired entries only . . *EXPIRED *ALL, *EXPIRED
Delete archived spool entries . *YES *YES, *NO
Update Archive Catalog . . . . . *YES *YES, *NO, *UNEXPIRED
ARCFILE name . . . . . *NONE Name, *NONE
      *LIBL Name, *LIBL
ARCFILE file member . . . . . *FILE Name, *FILE, *FIRST
Existing mbr opt for ARCFILE . *ERROR *REPLACE, *ERROR
File expiration date . . . . . *PERM Date, *PERM, *NONE

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys

```

## Selection Specifications (ARCID) Parameter

Specifies the **ID** of the selection specifications to be used when determining eligible spool entries to archive. Only spool entries that meet the selection specifications will be archived. For more information on defining selection specifications, refer to Chapter 8, "Define Archive or Purge Criteria".

**\*ALL:** No selection specifications will be used to limit the spool entries to archive. Thus all spool entries will be archived.

## Device (DEV) Parameter

Specifies the backup device (Tape) to place the spool entries. Specify up to four devices.

**\*ARCFILE:** The spool entries will be archived to a special disk file. The file must be a physical sequential file with record length **4096**. Multiple members can exist. The file must exist.

## Volume Identifier (VOL) Parameter

Specifies the volume **ID(s)** of the backup Media to use for the archive. Specify up to five volumes.

**\*MOUNTED:** The mounted volume will be used.

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

## File Label on Tape (FILELABEL) Parameter

Specifies the file label to assign to the archived spool entries.

**\*GENERATE:** Specifies that SpoolOrganizer is to assign a file name to the file. The generated name will begin with "BSO" and end with a 5-digit number (BSO00001, etc.).

## Tape Sequence Number (SEQNBR) Parameter

Specifies the tape sequence number where the file will reside. This parameter is ignored for **ARCFILES**.

**\*END:** The archive file will be placed at the end of the tape.

## End of Tape Option (ENDOPT) Parameter

Specifies the action the tape will perform after the archive is complete.

**\*REWIND:** The tape will rewind after the archive completes.

**\*LEAVE:** The tape will remain positioned after the archive completes.

**\*UNLOAD:** The tape will rewind and unload after the archive completes.

## Archive Expired Entries Only (EXPENTRY) Parameter

Specifies if only expired spool entries matching the **ARCID** parameter, or all spool entries matching the **ARCID** parameter will be archived. The spool entry's expiration date is set by the Online Database Period and Value prompts when defining Monitors and Selection Criteria.

**\*EXPIRED:** Only spool entries that are expired, and match the search criteria (**ARCID**) will be archived.

**\*ALL:** All spool entries which match the search criteria (**ARCID**) will be archived.

## Delete Archived Spool Entries (DLTARC) Parameter

Specifies if archived spool entries are to be removed from the online database after archived.

**\*YES:** Archived spool entries will be deleted from the Online Database.

**\*NO:** Archived spool entries will not be deleted from the Online Database.

## Update Archive Catalog (UPDARCCAT) Parameter

Specifies if a record of each archived spool entry is placed into the Archive Catalog.

**\*YES:** A record of each archived spool entry is placed into the archive catalog.

**\*NO:** No records are placed into the Archive Catalog.

**UNEXPIRED:** SpoolOrganizer calculates the expiration date for the entry (the date the spool entry

# SPOOLORGANIZER/400™

is eligible for purge out of the Archive Catalog). Only archived spool entries that have an expiration date greater than the current system date will be recorded in the Archive Catalog.

## **ARCFILE Name (ARCFILE) Parameter**

Specifies the name of the **ARCFILE** to place the archived spool entries into. The **ARCFILE** must exist. Specify a name and a library.

## **ARCFILE File Member (ARCMBR) Parameter**

Specifies the member within the **ARCFILE** to place the archived spool entries. If the member does not exist it will be created.

**\*FILE:** The member name will be the same as the file name.

**\*FIRST:** The first member defined will be used.

## **Existing Member Option for ARFILE (MBROPT) Parameter**

Specifies the action SpoolOrganizer will take if the member already exists.

**\*ERROR:** An error message is placed into the joblog and an escape message sent to the calling program. In normal situations you should specify **MBROPT(\*ERROR)** on the **ARCOLE** command and specify **MBROPT(\*REMOVE)** on the **ARCARCFDTA** command. This will insure that entries not written to tape are not lost.

**\*REPLACE:** The existing entries will be replaced with the new entries.

## **File Expiration Date (EXPDATE) Parameter**

Specifies, for tape devices, the file expiration date placed on the tape dataset. This value will be checked by **OS/400** on future write operations to the tape. If a write operation is specified (**SAVLIB** command, etc.) which would overwrite a file which is not expired, **OS/400** will send a warning message to the **QSYSOPR** msgq. Enter a date or specify one of the following:

**DATE:** The file can be overwritten after the expiration date has passed.

**\*PERM:** The file is permanent. A future operation that writes over this label will receive a warning.

**\*NONE:** The file can be overwritten after it is closed.

**Example:** The following example archives all joblogs and places them on the tape mounted on **QTAPE1**:

```
ARCOLE ARCID(JOBLOGS) DEV(QTAPE1) VOL(JOBLOG)
```

*Archive Online Database to Optical Disk*

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

The **OPTOLE** command will archive selected entries from the Online Database. It will place the spool entries into a directory on one or more Optical Disks, or into an **ARCFILE**. The contents of an **ARCFILE** can be written to Optical using the **OPTARCFDTA** command. The spool entries (and their data) can be displayed directly from Optical Disk or **ARCFILE**, and reprinted or placed into the Online Database. For more information, refer to Chapter 18, "Display Archived Media Selections".

The user can control which spool entries are archived. A search spec can be specified to limit the spool entries archived. All or expired entries can be specified. Archived spool entries can be optionally removed from the Online Database.

The **OPTOLE** command writes spool entries and an index into the specified Target Directory on the Optical Disk. The Target Directory can be a subdirectory, within a tree structure. Multiple Target directories can reside on a volume. The Target Directory can only contain one SpoolOrganizer (**OPTOUTQ**, **OPTOLE**, etc.) operation.

An **OPTOLE** operation can span multiple Optical volumes. SpoolOrganizer will fill up the first volume and write an index of this volume's spool entries. It will create the specified path and Target Directory on the next volume, then continue writing the rest of the entries and another index on the next volume. Each index contains only the spool entries on that volume. Mount messages and End-of Volume-List messages will be issued if needed.

**OPTOLE** can optionally place a record of specified spool entries into the Optical Catalog. Once in the Optical Catalog the spool entry can be searched, displayed, and printed similar to spool entries in the Online Database.

# SPOOLORGANIZER/400™

```
Optical Spool Entry Archive (OPTOLE)

Type choices, press Enter.

Selection Specifications . . . . . > _____ Name, *ALL
Volume Identifier . . . . . > _____
      + for more values _____
DirPath Name(s) . . . . . *ROOT
      + for more values _____

DirPath Not Found Option . . . *ERROR          *CREATE, *ERROR
Target Directory Name . . . . *GENERATE

Target Directory Exists Option *ERROR          *REPLACE, *ERROR
Archive Expired Entries Only . *EXPIRED        *ALL, *EXPIRED
Delete Archived Spool Entries . *YES           *YES, *NO
Update Optical Catalog . . . . *YES            *YES, *NO, *UNEXPIRED

Bottom
F3=Exit  F4=Prompt F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

The OPTOLE Screen and Parameters:

## Selection Specifications (ARCID) Parameter

Specifies the **ID** of the selection specifications to be used when determining eligible spool entries to archive. Only spool entries that meet the selection specifications will be archived. For more information on defining selection specifications, refer to Chapter 8, "Define Archive/Purge Specifications".

**\*ALL:** No selection specifications will be used to limit the spool entries to archive. Thus all spool entries will be archived.

## Volume Identifier (VOL) Parameter

Specifies the Volume **ID** of the Optical Disk that will receive the spool entries. The volumes must be defined in the Optical Library Dataserver and must be formatted. Specify up to five volumes, or **\*ARCFILE**.

**\*ARCFILE:** The spool entries will be archived to a special disk file. The file must be a physical sequential file with record length of 4096. Multiple members can exist in an **ARCFILE**. The file must exist.

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

## DirPath Name(s) (DIRPATH) Parameter

Specifies the directories that make up the path that the Target Directory will be placed into. Specify up to 30 directories, or \***ROOT**. Example: to place the Target Directory into path /A/B/C, specify **DIRPATH(A B C)**.

\***ROOT**: The Target Directory will be placed into the root directory.

**Note**: The length of the path generated (including slashes generated by SpoolOrganizer) cannot be greater than **63**.

## DirPath Not Found Option (DIROPT) Parameter

Specifies the action to take if the path specified in the **DIRPATH** parameter does not exist on the first volume. **Please note** that SpoolOrganizer will always create the directories in the second thru n volumes if they do not exist.

\***ERROR**: The **OPTOLE** command will end in error. An error message is placed into the joblog and escape message **SPO-1000** is sent to the calling program.

\***CREATE**: All directories not found in the specified path will be created.

## Target Directory Name (TRGTDIR) Parameter

Specifies the name of the Target Directory to contain the archived spool entries. SpoolOrganizer places multiple files into the specified Target Directory. The Target Directory is a sub directory of the path specified in the **DIRPATH** parameter. For example if the **DIRPATH** parameter defines path /A/B/C, Target Directory **TGT1** will appear as /A/B/C/TGT1. If the Target Directory does not exist it will be created.

\***CREATE**: SpoolOrganizer will create a unique name. The generated name will be "**BSO**" followed by a five-digit number (e.g. BSO00001).

## Target Directory Exists Option (TDIROPT) Parameter

Specifies the action to take if the specified Target Directory already exists in the specified path on any volume.

\***ERROR**: The **OPTOLE** command will end in error. An error message is placed into the joblog and escape message **SPO-1000** is sent to the calling program.

\***REPLACE**: The **OPTOLE** command will proceed. SpoolOrganizer/400 will place the spool entries into the specified Target Directory. A new index file will be written to the Target Directory, thus making any previously written spool entries irrecoverable.

## ARCFILE Name (ARCFILE) Parameter

Specifies the name of the **ARCFILE** to place the archived spool entries into. The **ARCFILE** must exist. Specify a name and a library.

# SPOOLORGANIZER/400™

## **ARCFILE File Member (ARCMBR) Parameter**

Specifies the member within the **ARCFILE** to place the archived spool entries. If the member does not exist it will be created.

**\*FILE:** The member name will be the same as the file name.

**\*FIRST:** The first member defined will be used.

## **Existing mbr opt for ARCFILE (MBROPT) Parameter**

Specifies the action SpoolOrganizer will take if the member already exists.

**\*ERROR:** An error message is placed into the joblog and an escape message sent to the calling program. In normal situations you should specify **MBROPT(\*ERROR)** on the **OPTOLE** command and specify **MBROPT(\*REMOVE)** on the **OPTARCFDTA** command. This will insure that entries not written to Optical are not lost.

**\*REPLACE:** The existing entries will be replaced with the new entries.

## **Archive Expired Entries Only (EXPENTRY) Parameter**

Specifies if only expired spool entries matching the **ARCID** parameter, or all spool entries matching the **ARCID** parameter will be archived. The spool entry's expiration date is set by the Online Database Period and Value prompts when defining Monitors and Selection Criteria.

**\*EXPIRED:** Only spool entries that are expired, and match the search criteria (**ARCUD**) will be archived.

**\*ALL:** All spool entries which match the search criteria (**ARCID**) will be archived.

## **Delete Archived Spool Entries (DLTARC) Parameter**

Specifies if archived spool entries are to be removed from the Online Database after archived.

**\*YES:** Archived spool entries will be deleted from the Online Database.

**\*NO:** Archived spool entries will not be deleted from the Online Database.

## **Update Optical Catalog (UPDOPTCAT) Parameter**

Specifies if a record of each archived spool entry is placed into the Optical Catalog.

**\*YES:** A record of each archived spool entry is placed into the Optical Catalog.

**\*NO:** No records are placed into the Optical Catalog.

**UNEXPIRED:** SpoolOrganizer calculates the expiration date for the entry (the date the spool entry is eligible for purge out of the Optical Catalog). Only archived spool entries that have an expiration

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

date greater than the current system date will be recorded in the Optical Catalog.

**Example:** The following example archives all joblogs and places them on the Optical volume SAVSPLE in directory JOBLOGS. The Target Directory will be JULY95:

OPTOLE ARCID(JOBLOGS) VOL(SAVSPLE) DIRPATH(JOBLOGS) TGTDIR(JULY95)

## *Write ARCFILE to Tape*

Use the ARCARCFDTA command to move the contents of an ARCFILE created by the ARCOLE or ARCOUTQ commands to tape. The ARCARCFDTA screen and parameters are:

```
Archive ARCFILE data (ARCRCFDTA)

Type choices, press Enter.

Device . . . . . Name
      + for more values
ARCFILE name . . . . . Name
                        *LIBL      Name, *LIBL
ARCFILE file member . . . *FILE      Name, *FILE, *FIRST
Volume Identifier . . . . *MOUNTED Character value, *MOUNTED
      + for more values
File label on tape . . . *GENERATE
Tape sequence number . . . *END      Number, *END
End of tape option . . . *REWIND   *REWIND, *LEAVE, *UNLOAD
Normal end member option . . *REMOVE  *REMOVE, *KEEP
Update Archive Catalog . . . *YES     *YES, *NO, *UNEXPIRED
File expiration date . . . *PERM    Date, *PERM, *NONE

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

### **Device (DEV) Parameter**

Specifies the backup device(s) to place the spool entries. Specify up to four devices.

### **ARCFILE Name (ARCFILE) Parameter**

Specifies the name of the ARCFILE.

# SPOOLORGANIZER/400™

## **ARCFILE File Member (ARCMBR) Parameter**

Specifies the member in the **ARCFILE** to move to tape.

## **Volume Identifier (VOL) Parameter**

Specifies the volume **ID(s)** of the backup Media to use for the archive. Specify up to five volumes.

**\*MOUNTED:** The mounted volume will be used.

## **File Label on Tape (FILELABEL) Parameter**

Specifies the file label to assign to the archived spool entries.

**\*GENERATE:** Specifies that SpoolOrganizer is to assign a file name to the file. The generated name will begin with "BSO" and end with a 5-digit number (BSO00001, etc.).

## **Tape sequence Number (SEQNBR) Parameter**

Specifies the tape sequence number where the file will reside. This parameter is ignored for **ARCFILES**.

**\*END:** The archive file will be placed at the end of the tape.

## **End of Tape Option (ENDOPT) Parameter**

Specifies the action the tape will perform after the archive is complete.

**\*REWIND:** The tape will rewind after the archive completes.

**\*LEAVE:** The tape will remain positioned after the archive completes.

**\*UNLOAD:** The tape will rewind and unload after the archive completes.

## **Normal end Member Option (MBROPT) Parameter**

Specifies the action SpoolOrganizer will take if the archive completes normally.

**\*REMOVE:** The member is removed from the **ARCFILE**.

**\*KEEP:** The member is not removed from the **ARCFILE**.

## **Update Archive Catalog (UPDARCCAT) Parameter**

Specifies if a record of each archived spool entry is placed into the Archive Catalog.

**\*YES:** A record of each archived spool entry is placed into the archive catalog.

**\*NO:** No records are placed into the Archive Catalog.

**\*UNEXPIRED:** SpoolOrganizer calculates the expiration date for the entry (the date the spool entry is eligible for purge out of the Archive Catalog). Only archived spool entries that have an AC expiration date greater than the current system date will be recorded in the Archive Catalog.

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

## File Expiration Date (EXPDATE) Parameter

Specifies the file expiration date placed on the tape dataset. This value will be checked by **OS/400** on future write operations to the tape. If a write operation is specified (**SAVLIB** command, etc.) which would overwrite a file which is not expired, **OS/400** will send a warning message to the **QSYSOPR** msgq. Enter a date or specify one of the following:

**\*PERM:** The file is permanent. A future operation that writes over this label will receive a warning.

**\*NONE:** The file can be overwritten after it is closed.

**Example:** The following example writes the member **JULY95** in **ARCFIELD JOBLOGS** to tape:

```
ARCARCFDTA DEV(QTAPE1) ARCFIELD(JOBLOGS) ARCMBR(JULY95) VOL(SAVSPL)
```

## *Write ARCFIELD to Optical Disk*

Use the **OPTARCFDTA** command to move the contents of an **ARCFIELD** created by the **OPTOLE** or **OPTOUTQ** commands to Optical disk.

The **OPTARCFDTA** Screen and Parameters are:

# SPOOLORGANIZER/400™

```
Archive ARCFILE to Optical (OPTARCFDTA)

Type choices, press Enter.

ARCFILE name . . . . . _____      Name
                                     *LIBL      Name, *LIBL
ARCFILE file member . . . . . *FILE      Name, *FILE, *FIRST
Volume Identifier . . . . . *ARCFILE
      + for more values _____
DirPath Name(s) . . . . . *ROOT
      + for more values _____

DirPath Not Found Option . . . . *ERROR      *CREATE, *ERROR
Target Directory Name . . . . . *GENERATE

Target Directory Exists Option      *ERROR      *REPLACE, *ERROR
Normal end member option . . . . *REMOVE      *REMOVE, *KEEP
Update Optical Catalog . . . . . *YES      *YES, *NO, *UNEXPIRED

Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

## ARCFILE Name (ARCFILE) Parameter

Specifies the name of the ARCFILE.

## ARCFILE File Member (ARCMBR) Parameter

Specifies the member in the ARCFILE to move to Optical disk.

## Volume Identifier (VOL) Parameter

Specifies the Volume ID of the Optical Disk that will receive the spool entries. The volumes must be defined in the Optical Library Dataserver and must be formatted. Specify up to five volumes, or \*ARCFILE.

\*ARCFILE: The Volume name will be the same as the ARCFILE name.

## DirPath Name(s) (DIRPATH) Parameter

Specifies the directories that make up the path that the Target Directory will be placed into. Specify up to 30 directories, or \*ROOT. **Example:** to place the Target Directory into path /A/B/C, specify DIRPATH(A B C).

# ARCHIVE ONLINE DATABASE TO TAPE OR OPTICAL

**\*ROOT:** The Target Directory will be placed into the root directory.

**Note:** The length of the path generated (including the Target Directory and slashes generated by SpoolOrganizer) cannot be greater than **63**.

## **DirPath Not Found Option (DIROPT) Parameter**

Specifies the action to take if the path specified in the **DIRPATH** parameter does not exist on the first volume. **Please note** that SpoolOrganizer will always create the directories in the second thru n volumes if they do not exist.

**\*ERROR:** The **OPTARCFDTA** command will end in error. An error message is placed into the joblog and escape message **SPO-1000** is sent to the calling program.

**\*CREATE:** All directories not found in the specified path will be created.

## **Target Directory Name (TRGTDIR) Parameter**

Specifies the name of the Target Directory to contain the archived spool entries. SpoolOrganizer places multiple files into the specified Target Directory. The Target Directory is a sub directory of the path specified in the **DIRPATH** parameter. For example: if the **DIRPATH** parameter defines path /A/B/C, Target Directory **TGT1** will appear as /A/B/C/TGT1. If the Target Directory does not exist it will be created.

**\*CREATE:** SpoolOrganizer will create a unique name. The generated name will be **"BSO"** followed by a five-digit number (e.g. BSO00001).

## **Target Dir Exists Option (TDIROPT) Parameter**

Specifies the action to take if the specified Target Directory already exists in the specified path on any volume.

**\*ERROR:** The **OPTARCFDTA** command will end in error. An error message is placed into the joblog and escape message **SPO-1000** is sent to the calling program.

**\*REPLACE:** The **OPTARCFDTA** command will proceed. Spool Organizer/400 will place the spool entries into the specified Target Directory. A new index file will be written to the Target Directory, thus making any previously written spool entries irrecoverable.

## **Normal End Member Option (MBROPT) Parameter**

Specifies the action SpoolOrganizer will take if the archive completes normally.

**\*REMOVE:** The member is removed from the **ARCFILE**.

**\*KEEP:** The member is not removed from the **ARCFILE**.

## **Update Optical Catalog (UPDOPTCAT) Parameter**

# SPOOLORGANIZER/400™

Specifies if a record of each archived spool entry is placed into the Optical Catalog.

**\*YES:** A record of each archived spool entry is placed into the Optical Catalog.

**\*NO:** No records are placed into the Optical Catalog.

**\*UNEXPIRED:** SpoolOrganizer calculates the expiration date for the entry (the date the spool entry is eligible for purge out of the Optical Catalog). Only archived spool entries that have an expiration date greater than the current system date will be recorded in the Optical Catalog.

**Example:** The following example writes the member **JULY95** in **ARCFILE JOBLOGS** to Optical disk:

```
OPTARCFDTA ARCFILE(JOBLOGS) ARCMBR(JULY95) VOL(SAVSPLE)  
DIRPATH(JOBLOGS) TGTDIR(JULY95)
```