

# DEFINE MONITORS

A Monitor is a task that processes available spool entries automatically as they appear in a specified outq. The user must define (and start) a Monitor if any of the following functions are desired:

- + **Delete, Hold, or Move certain spool entries to an outq**
- + **Place spool entries into the Online Database**
- + **Copy spool entries to multiple outq's**
- + **Report Distribution (Bundling)**
- + **Indexing**
- + **Send via E-mail to internet users**

When started, the Monitor will remain in a wait state until a spool entry appears in the outq with a ready status. OS/400 will activate the Monitor automatically. While in a wait status the Monitor consumes no resources (CPU, etc.). The Monitor will process all ready spool entries, then return to a dataq wait state.

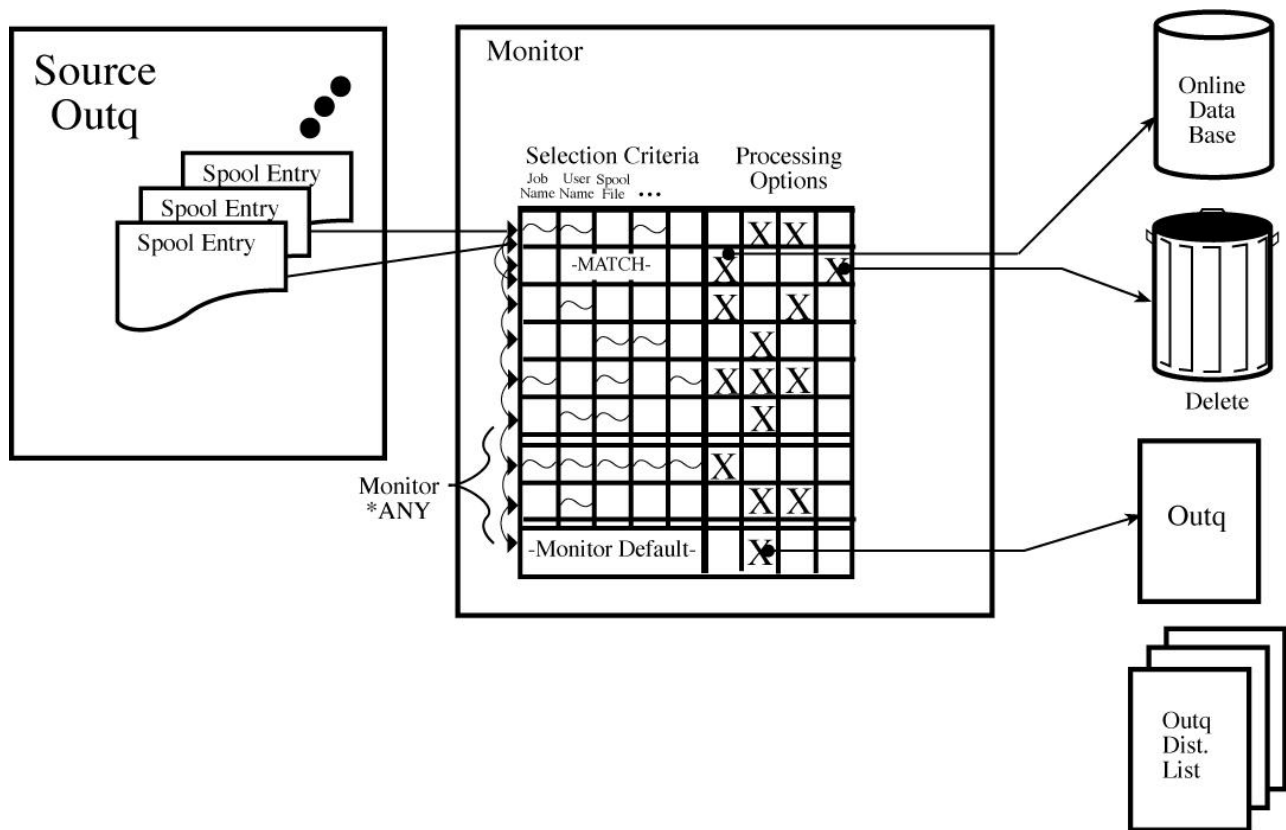


Figure 5-1: Monitor using Selection Specs

At startup the Monitor loads all Selection Specs with its name into tables in memory. Then all Selection specs with name \*ANY are loaded. Each selection Spec has two parts, the "Selection Criteria" part and the "Processing Options" part. For more information, refer to Chapter 6, "Define Selection Criteria". The Monitor then loads all Bundling and Indexing specifications defined for it. For more information, refer to Chapter 13, "Define Bundle Specifications" and Chapter 14, "Define Index Specifications".

When a ready spool entry appears in the outq being monitored, the Monitor compares the spool entry's

# SPOOLORGANIZER/400™

attributes with each selection spec looking for a match. **Please note: that only non-blank selection criteria fields are used for compare purposes.** If a match is found, the corresponding processing options are performed. If no selection specs match, the Monitor's default processing options are performed.

The Monitor then compares the spool entry to each Bundle spec it loaded looking for matches. If matches are found the Monitor sends requests to the Bundle Manager to process the spool entries into Bundles. The Monitor also processes any Index specs it loaded in a similar fashion.

Typically the outq being monitored is the outq started to the printer before installing SpoolOrganizer. See figure 1-2 for a before and after example. The printer should now be started to a new outq, and the Monitor should move entries that the administrator still wants printed to this new outq. If this is done no end user applications should need to be changed.

**Please note:** that because the end user can display the spool entries in the Online database, and is now able to print all or part of the spool entry after viewing it, the administrator may not want all spool entries to be printed any more. Also note that if Bundling is defined, the administrator may not want the spool entry to print for similar reasons. The administrator can delete these spool entries. The Selection Specifications described above allow the Monitor to process various spool entries differently.

Select **F6** to add a new Monitor. Enter the name of the Monitor to create and press **ENTER**. The following screen should appear:

# DEFINE MONITORS

```
SpoolOrganizer/400          ADD          5/06/96
Define Monitors              10:16:46

Monitor: TEST1

  From Outq/Library: _____ (Name, F4=Prompt)
  Perform Logging:   *NO          (*YES *NO)
  Process Held Entries: *NO          Delay: 30
  Status: *ACTIVE          (*ACTIVE, *INACTIVE)
  Descriptive Text: _____

          Default Processing Options

  To Outq: _____ (Name, *DLT, *HLD, F4=Prompt)
  Library: _____ (Name, F4=Prompt)
  Outq Dist List: *NONE          (*NONE, Name, F4=Prompt)
  E-Mail Spec: *NONE          (*NONE, Name, F4=Prompt)
  Online Database Period: _____ Value: 0
  Arc/Opt Catalog Period: _____ Value: 0
  Read Security Table: _____
  Change Security Table: _____
  User Remark: _____
  Banner Page Specifications: *NONE          Attribute Change Specs: *NONE
  Log Spool Entry Operations: *NO          *ALL *YES *NO *NONE
  Disassemble Data (Y/N): N
  User Exit Pgms: 1) *NONE 2: *NONE 3: *NONE 4: *NONE

F3=Exit  F12=Cancel Current Operation

          © Copyright 1989, 2002 Broderick Data Systems
```

The above parameters have the following definitions:

## From Outq

Specifies the outq to Monitor for available spool entries. Specify a two-part name (outq and library).

## Perform Logging

Specifies if this Monitor will log its functions to the SpoolOrganizer Log. This option is ignored unless the **LOG MONITORS** parameter is **\*SELECT** on the "Tailoring Options" screen. For more information on SpoolOrganizer Logging including the events logged and options, refer to Chapter 29, "Display SpoolOrganizer Log".

**\*NO:** The Monitor will not log its operations to the SpoolOrganizer Log.

**\*YES:** The Monitor will log its operations to the SpoolOrganizer Log.

# SPOOLORGANIZER/400™

## Process Held Entries

Specifies if the Monitor will process entries in a held status.

**\*NO:** The Monitor will not process entries on hold.

**\*YES:** The Monitor will process held entries as well as ready entries. The Monitor will periodically wake up and sample the source outq to determine if any held entries are present. See "Delay" below.

**Note:** Monitors can process spool entries in a save status along with held entries. See "Tailoring Options", Process SAV for more information.

## Delay

Specifies, for Monitors with Process Held Entries, the amount of time in seconds the Monitor will delay before resampling the source outq. Monitors will not be notified by OS/400 when a held entry is placed in the outq. Therefore the Monitors must periodically sample the outq. Once a Monitor detects an eligible spool entry in the outq, it will process all eligible spool entries in the outq before delaying.

**Note:** Spool entries with formtype "**BDSHOLD**" will not be processed by Monitors. Monitors that are processing held entries, and are instructed to hold the entry, will change the entry's formtype to **BDSHOLD**.

## Status

Specifies if the Monitor will be started when **MON(\*ALLACT)** is specified on the **STRSOMON** command. This option is intended to allow operations to start all production Monitors with one command, and to allow the administrator to create other Monitors that are not to be started.

**\*ACTIVE:** The Monitor will be started.

**\*INACTIVE:** The Monitor will not be started.

## Descriptive Text

Specify up to 30 characters of text that describes the Monitor.

## *Default Processing Options*

The following options are performed if no selection criteria specified for the Monitor match the spool entry's attributes.

## To Outq

Specifies the outq (if any) the Monitor is to place the spool entry into after processing it.

**\*DLT:** Specifies that the Monitor is to delete the spool entry after performing all other processing options.

# DEFINE MONITORS

**\*HOLD:** Specifies that the Monitor is to hold the spool entry after performing all other processing options.

## Outq Dist List

Specifies the name of an Outq Distribution List. Each outq contained in the Outq Distribution List will also receive a copy of the spool entry. Each copy is a "new" spool entry independent of the original; the user can delete, change, etc. any copy without affecting the other copies.

## E-Mail Spec

Specifies the name of an E-Mail Specification, which describes how the spool entry will be sent via E-Mail to Internet users. The E-Mail message is in addition to the to outq and outq distribution list processing. For more information, see Section V, "E-Mail".

## Online Database Period and Value

Specifies how long (if at all) the spool entry is to be kept active in the Online Database. Specify the following Period types:

**BLANK:** Do not place the spool entry into the Online Database.

**ND:** Number of days. Specifies the number of days from the date the spool entry entered the SpoolOrganizer Online Database the spool entry will be active.

**NM:** Number of Months. Specifies that the value given is the number of months. For example; if NM 3 is specified and a spool entry is processed on June 14th, it will expire on September 14th.

**NY:** Number of Years. Specifies the number of years the spool entry will be active in the Online Database.

**DT:** Date. Specifies the last day the spool entry is active. The specified value must be in the format YYYYMMDD.

**ME:** Month End. Specifies the last day of the month is the last day the spool entry will be considered active.

**QE:** Quarter End. Specifies the last day of the current quarter will be the last day the spool entry will be considered active.

**YE:** Year End. Specifies the last day of the year is the last day the spool entry is active.

**Note:** An expired spool entry will not be removed from the Online Database until an archive or purge is performed which selects it.

## Archive/Optical Catalog Period and Value

Specifies the amount of time (if any) the spool entry is tracked in the Archive/Optical Catalog. The user can search the Archive/Optical Catalog to easily locate the volume the desired spool entry resides. Please note

# SPOOLORGANIZER/400™

the spool entry's data is not online at this time. SpoolOrganizer calculates the expiration date based on the day the spool entry was placed into the Online Database.

## Read Security Table

Specifies the security access codes that a user must have to display or print the spool entry. Specify up to ten codes, each can be generic. For example A\* will match A, AX, AXX, etc. A value of \* means all users can display the spool entry.

## Change Security Table

Specifies the access codes a user must have to change a spool entry's attributes. Specify up to ten codes, each can be generic. For example A\* will match A, AX, AXX, etc. A value of \* means all users can change the spool entry.

## User Remark

Specifies up to 30 characters of text that will be attached to the spool entry's attributes when placed into the Online Database. The purpose of the user remark field is to allow users to group spool entries with no common characteristics together for later reference. Users will be able to use the User Remark field as search criteria to display, archive, and globally search spool entries.

## Banner Page Specifications

Specifies the name of the Banner Page Specifications to use to place Banner Pages around the spool entries moved to the To Outq field. For more information, refer to Chapter 10, "Define Banner Page Specifications"

**\*NONE:** No Banner Pages are produced.

## Attribute Change Specifications

Specifies the name of the Attribute Change Specification to use to change certain spool entry attributes before moving the spool entry to the To Outq. For more information, refer to Chapter 11, "Define Attribute Change Specifications".

**\*NONE:** No attribute changes will be made.

## Log Spool Entry Operations

Specifies, if logging is active, which spool entries will be logged. See the "Perform Logging" parameter above for more information concerning logging.

**\*NO:** Spool entries which the Monitor performs its default processing options on will not be logged. (Spool entries that are processed via a Selection Spec will use the Selection Spec's Log parameter to determine if they will be logged.)

**\*YES:** Spool entries which the Monitor performs its default processing options on will be logged. (Spool entries that are processed via a Selection Spec will use the Selection Spec's Log parameter to determine if they will be logged.)

# DEFINE MONITORS

**\*ALL:** All spool entries processed by the Monitor will be logged, regardless of the Log values on the Selection Specs.

**\*NONE:** No Spool entries processed by the Monitor will be logged, regardless of the Log values on the Selection Specs.

## Disassemble Data

Specifies if the Monitor will store the spool entry's data segments in a SpoolOrganizer format in addition to the IBM internal format when placing the spool entry into the Online Database, Archive Tapes, or Optical disk. Once disassembled, the spool entry can be processed much more quickly by other SpoolOrganizer functions:

- + Spool entry Display
- + Bundling, Partial Print
- + Indexing

For more information concerning Indexing, refer to Chapter 14, "Define Index Specifications".

**N:** Do not disassemble the spool entry data into SpoolOrganizer's format.

**Y:** Disassemble spool entry data into SpoolOrganizer's format.

## Notes:

- 1) Disassembling a spool entry approximately doubles the amount of space needed to store the spool entry. Disassembling the spool entry greatly increases the amount of Monitor processing time for the spool entry. Care should be taken when deciding which spool entries to disassemble.
- 2) If the Monitor determines the spool entry needs to be processed by the Index Manager, the spool entry will be disassembled.

## User Exit Programs

Specifies the name of the program the Monitor will call at certain times during execution. For more information, refer to Appendix A, "User Exit Programs".

**\*NONE:** No user written exit program will be called.

## *Damaged Data Queues*

When the administrator creates a Monitor, a data queue and data area with the same name is created in library **BDSDATA**. OS/400 can damage data queues if it halts abruptly, for example during a power failure. If a Monitor's data queue or data area is damaged, the administrator can recreate it by deleting the data queue or area, and then issuing a change operation (option 2) on the Monitor. No fields need to be actually

## **SPOOLORGANIZER/400™**

changed. SpoolOrganizer will create a data queue or data area if either does not exist.

**Note:** The administrator can also delete then restore the damaged/missing objects from a backup.

To recreate SpoolOrganizer data queues not associated with a monitor, refer to Appendix G, “Other Functions”.