

DEFINE INDEX SPECIFICATIONS

Index Specifications are used by the Index Manager and by Monitors to retrieve desired values from selected spool entries and place the values into indexes. Users can then query the Indexes using the DSPIDX command. Indexing uses Monitors to automatically process specified spool entries. Monitors will use their Selection Specs to identify spool entries which need to be sent to the Index Manager. The Monitor will place them into the Online Database and notify the Index Manager. The Index Manager will process each selected spool entry, searching it for specified values and placing the matching values into Indexes.

Before defining Index Specs, Monitors and Selection Specs must be created. Refer to the section "Planning Guide" in Chapter 2, "Installation" for the general tasks needed to implement Indexing.

Two copies of specifications are maintained by SpoolOrganizer; an administrative copy and a production copy. This allows the administrator to make changes while the Index Manager/Monitors are active. The APYIXSCHG command applies the administrative changes to the production copy. Menu options allow the production copy to be displayed.

The Index Manager and Monitors must be started in order for data to be collected and placed into Indexes. See Chapter 15, "Monitor Selections" and Chapter 21, "Control the Index Manager" for more information.

Note: To Improve performance and ease administration, a "Display Specifications" screen is provided to allow the user to limit the number of Index Specifications being displayed during the session. The user can limit the display to a starting/ending spec range. These specifications can be changed during the session by pressing F18.

To add an Index Specification, press F6. Enter the Following:

Name, ID

Specifies the two-part Index Name. Users will specify this name when searching Indexes. The name and ID must conform to OS/400 TYPE(*NAME) naming conventions. The ID can also be blank.

Data Type

Specifies the type of values to collect. The Index manager offers different features and options when collecting values from a spool entry, depending on the type. Specify one of the following:

C: The data type is character. Up to 50 characters can be collected.

D: The data type is decimal numeric. Values will be stored internally as signed packed decimal, 18 digits with 5 decimal places. The Index manager will edit the data on the page, removing nonnumeric characters.

Note: Users will need to specify the Index Name, ID, and Data Type in order to search indexes. The Administrator will need to provide this information to the user.

Press **ENTER** and the following screen will appear:

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Note: The screen for data type decimal is shown below. The screen for data type character is similar.

```

                                SpoolOrganizer/400 (TM)      ADD      4/04/96
                                Define Index Specification Criteria  18:47:07
                                .....

Index Name/ID/Data Type:  CUSTNUM      ACCTG      (D)ecimal
Selection Specs
  Monitor/ID/Sequence Number:  _____

Page/Data Definition  DECIMAL DATA      SEPARATORS
StL EnL StC EnC Rel  *...+...1...+...2  Comma  DecPt
_____      _____  EQ      00000      ,      .
  Data Length:  18  Qualifier Strings:  N  (Y/N)

                                QUALIFIER STRING DATA
A/O StC EnC Rel Len  *...+...1...+...2...+...3...+...4...+...5 UC
   1  255  CT  1      _____  Y
   -  1  255  CT  1      _____  Y

F3=Exit  F12=Cancel Current Operation
  
```

The above parameters have the following definitions:

Monitor/ID/Sequence Number

Specifies the Monitor Selection Specification (or Monitor default processing) to identify spool entries to be Indexed. In addition to its own processing options, the Monitor will pass spool entries matching this Selection Spec to the Index Manager for Index Processing. The Monitor and Selection Spec must be defined before it is referenced here, and must be defined such that it places matching spool entries into the Online Database. Multiple Index Specs can reference the same Selection Spec. For more information, see Chapter 5, "Defining Monitors" and Chapter 6, "Defining Selection Criteria".

Monitor

*ANY: Specifies that all Monitors will load this Selection Spec (This is a special value when creating Selection Specs).

ID

*MONITOR: To specify the Monitor's default processing options, specify the Monitor name in the

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Monitor field, *MONITOR in the ID field, and zero in the Sequence Number field. This will instruct the Monitor to send all spool entries which do not match any of its selection specs to the Index Manager.

Page Data Definition

Specifies the area in the page and the values the Index Manager will check for. Matching values in this range will be placed into the Index.

StL, EnL (Start/End Line)

Specifies the line range on each page where the Index Manager will look for specified values.

StC, EnC (Start/End Column)

Specifies the column range within the line range specified above where the Index Manager will look for specified values.

Rel (Relation)

Specifies the relationship to use to collect values for the index. Specify one of the following relations:

EQ: Equal to

NE: Not equal to

GT: Greater than

LT: Less than

GE: Greater than or equal to

LE: Less than or equal to

CT: Contains (type Character only)

Character Data or Decimal Data

Specifies the data to use in the relation. For character, specify up to 50 characters. For decimal, specify a number, maximum 18 digits w/5 decimal positions.

Note: The relation is interpreted as follows:

(print data) Rel (spec data)

UC (Ignore upper/lower case differences) (Character only)

Specifies if upper/lower case differences are to be ignored for comparison purposes.

Y: Ignore upper/lower case differences.

N: Do not ignore upper/lower case differences.

Comma (Decimal only)

Specifies the character used to separate thousands, millions, billions, etc. In the US it is a comma. This character will be ignored when the Index Manager edits the print data.

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DecPT (Decimal only)

Specifies the character used to separate the integer portion of a number from the fractional portion. In the US it is a period.

Data Length

Specifies the length of the data in the data field.

Qualifier Strings

Qualifier strings allow the user to further define which lines on each page contain the values desired in the index. Thus the user can specify a large line range, and eliminate unwanted lines via qualifier strings.

Qualifier strings will only be tested on lines which match the primary relationship specified above.

Qualifier strings are type character.

Y: Qualifier strings will be specified below.

N: Qualifier strings will not be specified.

If Y is specified, up to 5 qualifier string relations can be specified.

A/O (And/Or)

Specifies if the line is to be ANDed or ORed with the previous line. Boolean logic applies. For example the ANDs are performed first and the results are ORed to get a final result.

StC, EnC (Start/End column)

Specifies the start/end columns.

Rel (Relation)

Specifies the relationship to use to collect values for the index. Specify one of the following relations:

EQ: Equal to

NE: Not equal to

GT: Greater than

LT: Less than

GE: Greater than or equal to

LE: Less than or equal to

CT: Contains

Data

Specifies the data to use in the relation. Specify up to 50 characters.

Note: The relation is interpreted as follows:

(print data) Rel (qualifier data)

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UC (Ignore upper/lower case differences)

Specifies if upper/lower case differences are to be ignored for comparison purposes.

Y: Ignore upper/lower case differences.

N: Do not ignore upper/lower case differences.