**SET statement**

You can use SET to do any of the following:

1. Position the cursor on a map field
2. Change the attribute of a map field
3. Set an SQL row record item to null
4. Clear a map or record
5. Skip to a new page
6. Establish a position in a file
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ÊÊ SET

,

record » SCAN

EMPTY

SQL row record item NULL

,

map » PAGE

ALARM

CLEAR

EMPTY

,

map item » CURSOR FULL

NORMAL

DEFINED

,

map item » CURSOR

FULL

color

ext-hilite

MODIFIED

BRIGHT

DARK

PROTECT

AUTOSKIP

**SET**

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**color**

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MONO

BLUE

PINK

YELLOW

TURQ

RED

GREEN

WHITE

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**ext-hilite (extended highlighting)**

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NOHILITE

BLINK

RVIDEO

USCORE

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**SET**

|  |  |
| --- | --- |
| **Attribute** | **Description** |
|  |  |
| record | Name of a record. |
|  |  |
| SQL row | Name of a data item in an SQL row record or an SQL item parameter |
| record item | for a function. The item name can be qualified by the record name. |
|  |  |
| map | Name of a map. |
|  |  |
| map item | Name of a variable field on a map or a map item parameter for a |
|  | function. A map item can be subscripted, qualified, or both. |
|  |  |
| SCAN | Used to establish the scan position for an indexed file or DL/I |
|  | database without having to use an INQUIRY I/O option. If the record |
|  | is an indexed file, the action taken depends on the next option |
|  | selected. |
|  | v If the option executed for the file is a SCAN, the next record |
|  | retrieved from a file will have a key value greater than or equal to |
|  | the record ID item defined for the record. |
|  | v If the option executed for the file is a SCANBACK, the record |
|  | retrieved will be the record with the highest key value that is less |
|  | than or equal to the record ID item defined for the record. |
|  | v Options other than SCAN and SCANBACK cause the condition to |
|  | be reset and ignored. |
|  | A SET record SCAN with a key value set to all X©FF© bytes prior to a |
|  | SCANBACK sets the position pointer in all environments to the end of |
|  | the file, so that the next SCANBACK retrieves the last record in the |
|  | file. |
|  | For DL/I records, you must set the segment key value and the key |
|  | values of its parent segments, if there are parent segments, in the DL/I |
|  | database. |
|  | If the record is in a DL/I database and the next option executed for |
|  | the record is a SCAN using the default search arguments, then the |
|  | DL/I call is modified to retrieve the first occurrence of the record in |
|  | the database at or following the position indicated by the segment key |
|  | value and the key values of its parent segments in the database. |
|  | SET record SCAN can be used only with DL/I calls with Scan in |
|  | Parent equal to No and unmodified SSA lists. If the next option |
|  | executed for that segment is a SCAN DL/I function with a modified |
|  | SSA list, execution is terminated. If the next option executed for the |
|  | segment is not a SCAN, the condition is reset and ignored. |
|  |  |

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**SET**

|  |  |
| --- | --- |
| **Attribute** | **Description** |
|  |  |
| EMPTY | Used to initialize all data items in a record (blanks for character, |
|  | mixed, DBCS and Unicode data items; zeros for numeric data items; |
|  | and binary zeros for binary and hexadecimal data items). |
|  | If the record is a working storage record, the level-77 items are not |
|  | affected by the SET record EMPTY statement. |
|  | For a data structure that is subdivided, a SET record EMPTY statement |
|  | does the same thing as specifying individual MOVE statements of the |
|  | default values for each data item in the structure. |
|  | If specified for a map, EMPTY causes the contents of each map field to |
|  | be set to 0 for numeric fields, or blanks for character, mixed, and |
|  | DBCS fields. The field attributes are not changed. |
|  |  |
| NULL | Sets the null indicator for an item in an SQL row record structure to |
|  | the null condition (value -1). The condition has no effect on items not |
|  | in SQL row records. |
|  |  |
| PAGE | Used to clear the display or advance the paper to the top of the next |
|  | page before the next CONVERSE or DISPLAY I/O option. |
|  | This condition affects the device for the next CONVERSE or DISPLAY |
|  | I/O option for any map, not just the one specified in the SET |
|  | statement. |
|  | An automatic SET PAGE is performed when a different fixed map |
|  | appears that would be positioned on any of the same lines as defined |
|  | in an already displayed fixed map (unless the maps match exactly on |
|  | start position and depth). |
|  | If this map is the first in a program and is going to a printer, the |
|  | program user must position the paper to the top of the page before |
|  | running the program, unless a SET map PAGE is used. If a called and |
|  | calling program are both printing to the same file, a CLOSE map can |
|  | be issued before the first DISPLAY in the called program to ensure that |
|  | the paper is positioned correctly for the called program. |
|  |  |
| ALARM | Causes the display alarm to sound on the next CONVERSE I/O option |
|  | when the specified map appears. |
|  |  |
| CLEAR | Resets the map to its originally defined state. The specified map does |
|  | not have to be the next map displayed. The attributes and contents for |
|  | the fields are set to the original values defined for the map. |
|  |  |
| CURSOR | Positions the cursor on the first position of a map field when the map |
|  | appears. If more than one SET map field CURSOR is issued for a map, |
|  | the cursor is positioned on the map field of the last SET statement |
|  | issued. The CURSOR state does not affect any other condition. |
|  |  |

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**SET**

|  |  |
| --- | --- |
| **Attribute** | **Description** |
|  |  |
| NORMAL | Displays data with normal intensity, and a map field is set to |
|  | UNPROTECTED and UNMODIFIED. The only conditions that can be |
|  | used with NORMAL are CURSOR and FULL. |
|  |  |
| DEFINED | Displays data with the attributes originally defined for the map field. |
|  | The only conditions that can be used with DEFINED are CURSOR and |
|  | FULL. |
|  |  |
| FULL | Used to remind the program's users that a field should be completely |
|  | filled. |
|  | Asterisks are placed in an empty or blank field when the map is |
|  | displayed by the CONVERSE I/O option. |
|  | When the program user types data in the variable field, any remaining |
|  | asterisks are part of the data. |
|  | If a map field has a fill character other than the default specified, the |
|  | fill character is used instead of the asterisks. |
|  | The asterisks only appear on the map, and not in internal storage if |
|  | the map field is not set to MODIFIED. The program user must clear |
|  | the field of the asterisks if data is entered in the fields to prevent the |
|  | asterisks from being passed to the program. |
|  | FULL remains in effect until another SET map item statement for this |
|  | field executes or something else is done that clears the field attributes, |
|  | such as a SET map CLEAR. SET FULL is for each individual item, not |
|  | the map structure. |
|  | SET of an empty mixed map field FULL causes single-byte asterisks to |
|  | appear in the map field the next time it is displayed. To be considered |
|  | empty, the map field must contain all single-byte blanks. |
|  | If the program wants the use of SET map item FULL to be honored, |
|  | the map group must be generated with the /SETFULL generation |
|  | option. If the /NOSETFULL generation option is specified, the |
|  | mapping services program will not place an asterisk (\*) in fields that |
|  | have been set full. |
|  |  |
| color | Sets the color attribute for a map field to one of the following colors: |
|  | monochrome, blue, pink, yellow, turquoise, red, green, or white. |
|  |  |
| ext-hilite | Sets the extended highlighting attribute for a map field to one of the |
|  | Following values: no extended highlighting, blink, reverse video, or |
|  | underscore. |
|  |  |

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|  |  |
| --- | --- |
|  | **SET** |
|  |  |
| **Attribute** | **Description** |
|  |  |
| MODIFIED | Used to set the status of the variable field to modified. This forces the |
|  | contents of the field to be returned to the program on the next |
|  | CONVERSE. |
|  | The modified condition does not have any affect on the map field until |
|  | the map is conversed. A TEST MODIFIED statement before a map is |
|  | conversed does not give a true condition as a result of this SET |
|  | statement. This statement can also be used to force editing of the data |
|  | (non-blank character or non-zero numeric) in a field when the map is |
|  | conversed. |
|  | The modified condition is reset before the next display of a map unless |
|  | another SET map field MODIFIED statement is executed. |
|  |  |
| BRIGHT | Displays a map field with bright intensity. |
|  | If you are running on a color display and all your map fields are |
|  | defined with default colors, the BRIGHT operand causes the color of a |
|  | normal unprotected field to be changed from green to red. (A normal |
|  | protected field changes from blue to white.) Otherwise, no color |
|  | change takes place. |
|  |  |
| DARK | Used to prevent the variable field from displaying data. |
|  | DARK is usually used for security reasons, such as passwords. |
|  |  |
| PROTECT | Protects a map field from modification by a user. |
|  | PROTECT and AUTOSKIP cannot be specified together because |
|  | AUTOSKIP forces PROTECT. |
|  |  |
| AUTOSKIP | Protects a map field from modification by a user, by causing the cursor |
|  | to skip over this field. |
|  |  |

**Definition considerations for SET**

When using the SET statement to set a map field with attributes other than cursor, color, or extended highlighting, the specified attributes act as a complete replacement for all attributes other than cursor, color, extended highlighting, numeric, and fold attributes specified at map definition.

When using the SET statement within a function, you may set the map attributes of a parameter item as long as the parameter item has been defined as a map item parameter or the SQL attributes as long as the parameter item has been defined as an SQL item parameter. This capability allows reusable routines to be written to handle the map and SQL item processing.

When using the SET statement to assign color and extended highlighting attributes to variable map items, you can specify only one color and one extended highlighting attribute. They can be combined with any other map

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**SET**

item attribute values except DEFINED and NORMAL. Both DEFINED and CLEAR reset the color and extended highlighting attributes to those originally defined in map definition. NORMAL has no effect on either color or extended highlighting.

The following guidelines also apply to the color and extended highlighting attributes:

1. If you issue more than one SET statement containing color or extended highlighting for a map item before the map is displayed, the selection that was specified last is used.
2. If you are using a color display and assign a color to a field on a map containing all monochrome fields, execution will switch from four-color mode to seven-color mode. To prevent colors from changing inadvertently, you can explicitly assign colors to the fields on the map in map or program definition instead of accepting the monochrome default.
3. If you specify a combination of regular highlighting (BRIGHT, DARK), color, or extended highlighting attributes for a map item, the resulting appearance of the item is device-dependent. Some of the attributes you set might not be visible on the map.

**Target environments for SET**

|  |  |
| --- | --- |
| **Environment** | **Compatibility considerations** |
|  |  |
| VM CMS | None. |
|  |  |
| VM batch | None. |
|  |  |
| CICS for | None. |
| MVS/ESA |  |
|  |  |
| MVS/TSO | None. |
|  |  |
| MVS batch | None. |
|  |  |
| IMS/VS | None. |
|  |  |
| IMS BMP | None. |
|  |  |
| CICS for | None. |
| VSE/ESA |  |
|  |  |
| VSE batch | None. |
|  |  |
| CICS for OS/2 | None. |
|  |  |
| OS/400 | None. |
|  |  |
| OS/2 (GUI) | Only statements supported are: |
|  | v SET record EMPTY |
|  | v SET SQL row record item NULL |
| Windows (GUI) | Same as OS/2 (GUI). |
|  |  |
| OS/2 (C++) | None. |
|  |  |

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**SET**

|  |  |
| --- | --- |
| **Environment** | **Compatibility considerations** |
|  |  |
| AIX | None. |
|  |  |
| HP-UX | None. |
|  |  |
| CICS for AIX | None. |
|  |  |
| Windows NT | None. |
| (C++) |  |
|  |  |
| Windows NT | None. |
| (Java) |  |
|  |  |
| CICS for | None. |
| Windows NT |  |
|  |  |
| Solaris | None. |
|  |  |
| CICS for Solaris | None. |
|  |  |
| Test Facility | None. |
|  |  |

**Examples for SET**

The following resets MAP1 to its original state:

SET MAP1 CLEAR;

The following clears the panel and resets MAP1 to its original state before it appears, and to sounds the terminal alarm when MAP1 appears:

SET MAP1 PAGE, CLEAR, ALARM;

The following sets all the fields in a record called REC1 to zero (numeric data items) or blank (character data items):

SET REC1 EMPTY;

The following sets the color to red and the extended highlighting to blink:

SET MAPITEM RED,BLINK;

The following sets the extended highlighting to reverse video, to protect a map field, and sets the color to turquoise:

SET MAPITEM RVIDEO,PROTECT,TURQ;