SET ITEM PROPERTY Built-in

Description

Modifies all instances of an item in a block by changing a specified item property. Note that in some cases you can *get* but not *set* certain object properties.

Syntax

```
SET_ITEM_PROPERTY
(item_id ITEM,
property NUMBER,
value VARCHAR2);
SET_ITEM_PROPERTY
(item_name VARCHAR2,
property NUMBER,
value VARCHAR2);
SET_ITEM_PROPERTY
(item_id ITEM,
property NUMBER,
x NUMBER);
SET_ITEM_PROPERTY
(item_name VARCHAR2,
property NUMBER,
x NUMBER);
SET ITEM PROPERTY
(item_id ITEM,
property NUMBER,
x NUMBER,
y NUMBER);
SET ITEM PROPERTY
(item_name VARCHAR2,
property NUMBER,
x NUMBER,
y NUMBER);
```

Built-in Type unrestricted procedure

Enter Query Mode yes

Parameters

The unique ID that Oracle Forms assigned to the object when it created it. Use the FIND_ITEM built-in to return the ID to a variable with datatype of ITEM.

item name

The name you gave the item when you created it. Datatype is VARCHAR2.

property

The property you want to set for the given item. Possible properties are:

ALIGNMENT The text alignment (text and display items only). Valid values are ALIGNMENT_START, ALIGNMENT_END, ALIGNMENT_LEFT, ALIGNMENT_ CENTER, ALIGNMENT RIGHT. See the ustification Property for more information.

AUTO_HINT Determines if Oracle Forms will display help hints on the status line automatically when input focus is in the specified item. Valid values are PROPERTY_TRUE and PROPERTY_FALSE. See<u>Display Hint Automatically Property for more information</u>.

<u>AUTO_SKIP</u> Specifies whether the cursor should skip to the next item automatically when the end user enters the last character in a text item. Valid only for a text item. Valid values are PROPERTY_TRUE and PROPERTY_FALSE.

BACKGROUND COLOR The color of the object's background region. The property value is a reference to an RGB value such as r191g223b191.

BORDER BEVEL Specifies the item border bevel for the specified item instance. Valid values are RAISED, LOWERED, or PLAIN (unbeveled).

Note: You cannot set BORDER_BEVEL if the item's Bevel property is set to None in Oracle Forms.

<u>CASE INSENSITIVE QUERY</u> Specifies whether query conditions entered in the item should be case-sensitive. Valid values are PROPERTY TRUE and PROPERTY FALSE.

<u>CASE RESTRICTION</u>Specifies the case restriction applied to any text entered in the indicated text item. Valid values are UPPERCASE, LOWERCASE, or NONE.

<u>CONCEAL_DATAS</u> Specify the constant PROPERTY_TRUE if you want the item to remain blank or otherwise obscured when the end user enters a value. Specify the constant PROPERTY_FALSE if you want any value that is typed into the text item to be visible.

<u>CURRENT RECORD ATTRIBUTES</u> pecifies VARCHAR2 name of the named visual attribute used when an item is part of the current record. If the named visual attribute does not exist, you will get an error message.

<u>CURRENT ROW BACKGROUND COLOR</u> The color of the current record's background region.

<u>CURRENT ROW FILL PATTERN</u>The pattern to be used for the current record's fill region. Patterns are rendered in the two colors specified by Background Color and Foreground Color.

CURRENT ROW FONT NAME The font family, or typeface, that should be used for text in the current record. The list of fonts available is system-dependent.

CURRENT ROW FONT SIZE The size of the font, specified in points.

CURRENT ROW FONT SPACING The width of the font, that is, the amount of space between characters (kerning).

CURRENT ROW FONT STYLE The style of the font.

CURRENT ROW FONT WEIGHT The weight of the font.

<u>CURRENT ROW FOREGROUND COLOR</u> The color of the current record's foreground region. For items, the Foreground Color attribute defines the color of text displayed in the item.

DIRECTION Specifies the layout direction for bidirectional objects. Valid values are DIRECTION DEFAULT, RIGHT TO LEFT, LEFT TO RIGHT.

DISPLAYED Specifies whether the item will be displayed/enabled or hidden/disabled.

<u>ECHO</u> Specifies whether characters an end user types into a text item should be visible. When Echo is false, the characters typed are hidden. Used for password protection. Valid values are PROPERTY TRUE and PROPERTY FALSE.

ENABLED Specifies whether end users should be able to manipulate an item. Valid values are PROPERTY_TRUE and PROPERTY_FALSE.

Note: Setting Enabled to false will cause other item property settings to change.

<u>FILL PATTERN</u>The pattern to be used for the object's fill region. Patterns are rendered in the two colors specified by Background Color and Foreground Color.

FONT NAME The font family, or typeface, that should be used for text in the object. The list of fonts available is system-dependent.

FONT SIZE The size of the font, specified in hundredths of a point (i.e., for a font size of 8 points, the value should be set to 800).

FONT SPACING The width of the font, that is, the amount of space between characters (kerning).

FONT_STYLE The style of the font.

FONT_WEIGHT The weight of the font.

<u>FOREGROUND COLOR</u> The color of the object's foreground region. For items, the Foreground Color attribute defines the color of text displayed in the item. The property values a reference to an RGB value such as r191g223b191.

FORMAT MASK Specifies the display format and input accepted for data in text items.

HEIGHT Specifies the height of the item.

HINT TEXT Specifies the item-specific help text displayed on the message line at runtime. If the text specified is NULL, the original hint text, specified in Oracle Forms, will be restored.

ICON_FILENAME Specifies the file name of the icon resource associated with a button item having the **Iconic** property set to YES.

IMAGE DEPTH Specifies the depth of color to be applied to an image item.

INSERT_ALLOWEDIN a new record, allows end user to insert items normally when set to PROPERTY_TRUE. Specify PROPERTY_FALSE to specify that the item does not accept modification, but is displayed normally (not grayed out). (Insert_Allowed does not propagate changes to the Enabled property.)

<u>ITEM IS VALID</u> Specifies whether the current item should be considered valid. Set to PROPERTY_TRUE or PROPERTY_FALSE.

ITEM_SIZE Specifies a width and height for the item as two numbers separated by a comma. Use the syntax that includesx, *y*.

KEEP POSITION Specifies whether the Keep Cursor Position property should be true or false. When Keep Cursor Position is true, the cursor returns to the same position it was in when it left the text item. When Keep Cursor Position is false, the cursor returns to the default position in the text item. Valid values are PROPERTY_TRUE and PROPERTY_FALSE.

LABEL Specifies the VARCHAR2 string that you want displayed as the label of the item. This property is only valid for items that have labels, such as buttons.

LOCK RECORD ON CHANGE Specify the constant PROPERTY_TRUE if you want the record to be locked when this item is changed. Specify the constant PROPERTY_FALSE if you do not want the record locked when this item is changed. Use primarily when connecting to a non-ORACLE data source that does not have row-level locking.

LOV NAME Specify the VARCHAR2 name of an LOV to be associated with the given item. If the LOV name does not exist, you will get an error message.

MERGE CURRENT RECORD ATTRIBUTE Merges the contents of the specified visual attribute with the current row's visual attribute (rather than replacing it).

MERGE TOOLTIP ATTRIBUTE Merges the contents of the specified visual attribute with the tooltip's current visual attribute (rather than replacing it).

MERGE_PROMPT_VISUAL_ATTRIBUTE Specifies the named visual attribute that should be applied to the prompt at runtime.

MERGE VISUAL ATTRIBUTEMerges the contents of the specified visual attribute with the object's current visual attribute (rather than replacing it).

MOUSE NAVIGATE Specifies whether Oracle Forms should navigate and set focus to the item when the end user activates the item with the mouse. Specify the constant PROPERTY_TRUE if you want the end user to be able to navigate to the item using the mouse. Specify the constant PROPERTY_FALSE if you want a mouse click to keep the input focus in the current item.

NAVIGABLE Specify the constant PROPERTY_TRUE if you want the end user to be able to navigate to the item using default keyboard navigation. Specify the constant PROPERTY_FALSE if you want to disable default keyboard navigation to the item. (Keyboard Navigable does not propagate changes to the Enabled property.)

NEXT NAVIGATION ITEM Specifies the name of the item that is defined as the "next navigation item" with respect to this current item.

POSITION Specify the x, y coordinates for the item as NUMBERs separated by a comma. Use the syntax that includesx, y.

PREVIOUS NAVIGATION ITEM Specifies the name of the item that is defined as the "previous navigation item" with respect to this current item.

<u>PRIMARY_KEY</u> Specify the constant PROPERTY_TRUE to indicate that any record inserted or updated in the block must have a unique characteristic in order to be committed to the database. Otherwise, specify the constant PROPERTY_FALSE.

PROMPT ALIGNMENT OFFSET Determines the distance between the item and its prompt in the current record.

PROMPT DISPLAY STYLE Determines the prompt's display style in the current record, either PROMPT_FIRST_RECORD, PROMPT_HIDDEN, or PROMPT_ALL_RECORDS.

PROMPT EDGE Determines which edge the item's prompt is attached to in the current record, either START EDGE, END EDGE, TOP EDGE, or BOTTOM EDGE.

PROMPT EDGE ALIGNMENT Determines which edge the item's prompt is aligned to in the current record, either ALIGNMENT START, ALIGNMENT END, or ALIGNMENT CENTEF

PROMPT EDGE OFFSET Determines the distance between the item and its prompt in the current record as a VARCHAR2 value.

PROMPT FILL PATTERN The pattern to be used for the prompt's fill region in the current record. Patterns are rendered in the two colors specified by Background Color and Foreground Color.

PROMPT FONT NAME The font family, or typeface, that should be used for text in the prompt in the current record. The list of fonts available is system-dependent.

PROMPT FONT SIZE The size of the font, specified in points in the current record.

PROMPT FONT SPACING The width of the font, that is, the amount of space between characters (kerning) in the current record.

PROMPT FONT STYLE The style of the font in the current record.

PROMPT FONT WEIGHT The weight of the font in the current record.

<u>PROMPT FOREGROUND COLOR</u> The color of the prompt's foreground region in the current record. For items, the Foreground Color attribute defines the color of text displayed in the item.

PROMPT TEXT Determines the text label that displays for an item in the current record.

<u>PROMPT_TEXT_ALIGNMENT</u> Determines how the prompt is justified in the current record, either ALIGNMENT_START, ALIGNMENT_LEFT, ALIGNMENT_RIGHT, ALIGNMENT_CENTER, or ALIGNMENT_END.

PROMPT VISUAL ATTRIBUTESpecifies the named visual attribute that should be applied to the prompt at runtime in the current record.

QUERYABLE Specify the constant PROPERTY_TRUE if you want the end user to be able to initiate a query against the item. Specify the constant PROPERTY_FALSE if you want to disallow the use of the item in a query.

QUERY_ONLY Specify an item to be queried, preventing that item from becoming part of insert or update statements. QUERY_ONLY is applicable to text items, radio groups, and check boxes. Enclose the fully-qualified item name in single quotes.

REQUIRED Specify the constant PROPERTY_TRUE if you want to force the end user to enter a value for the item. Specify the constant PROPERTY_FALSE if the item is not to be required.

TOOLTIP PROPERTY Specifies the help text that should appear in a small box beneath the item when the mouse enters the item in the current record.

TOOLTIP BACKGROUND COLOR The color of the tooltip's background region in the current record.

TOOLTIP FILL PATTERNThe pattern to be used for the tooltip's fill region in the current record. Patterns are rendered in the two colors specified by Background Color and Foreground Color.

TOOLTIP FONT NAME The font family, or typeface, that should be used for text in the tooltip in the current record. The list of fonts available is system-dependent.

TOOLTIP FONT SIZE The size of the font, specified in points of the tooltip in the current record.

TOOLTIP FONT SPACING The width of the font, that is, the amount of space between characters (kerning) of the tooltip in the current record.

TOOLTIP FONT STYLE The style of the font of the tooltip in the current record.

TOOLTIP FONT WEIGHT The weight of the font of the tooltip in the current record.

<u>TOOLTIP FOREGROUND COLOR</u> The color of the tooltip's foreground region in the current record. For items, the Foreground Color attribute defines the color of text displayed in the item.

TOOLTIP TEXT Determines the item's tooltip text in the current record.

<u>UPDATE ALLOWED</u>Specify the constant PROPERTY_TRUE if you want the end user to be able to update the item. Specify the constant PROPERTY_FALSE if you want the item protected from update.

<u>UPDATE_COLUMN</u> Specify the constant PROPERTY_TRUE if this column should be treated as updated, and included in the columns to be written to the database. Specify the constant PROPERTY_FALSE if this column should be treated as not updated, and not be included in the columns to be written to the database.

<u>UPDATE_NULL</u>Specify the constant PROPERTY_TRUE if you want the end user to be able to update the item only if its value is NULL. Specify the constant PROPERTY_FALSE you want the end user to be able to update the value of the item regardless of whether the value is NULL.

<u>UPDATE_PERMISSION</u> Use UPDATE_ ALLOWED when you run against non-ORACLE data sources. Specify the constant PROPERTY_TRUE to turn on the item's UPDATEABLE and UPDATE_NULL properties. Specify the constant PROPERTY_FALSE to turn off the item's UPDATEABLE and UPDATE_NULL properties.

<u>VALIDATE_FROM_LIST</u>Specifies that Oracle Forms should validate the value of the text item against the values in the attached LOV when set to PROPERTY_TRUE. Specify PROPERTY_FALSE to specify that Oracle Forms should not use the LOV for validation.

<u>VISIBLE</u> Specifies whether the indicated item should be visible or hidden. Valid values are PROPERTY_TRUE and PROPERTY_FALSE.

Note: Setting Visible to false will cause other item property settings to change.

VISUAL ATTRIBUTESpecify a valid named visual attribute that exists in the current form.

Note: You cannot set the visual attribute for an image item, nor use a logical attribute from a resource

file as a Visual Attribute.

<u>WIDTH</u> Specify the width of the item as a NUMBER. The size of the units depends on how you set the Coordinate System property and default font scaling for the form.

X_POS

Specify the x coordinate as a NUMBER.

Y POS

Specify the y coordinate as a NUMBER.

value

Specify the value to be applied to the given property. The data type of the property determines the data type of the value you enter. For instance, if you want to set the VISIBL property to true, you specify the constant PROPERTY_TRUE for the value. If you want to change the LABEL for the item, you specify the value, in other words, the label, as a VARCHAR2 string.

PROPERTY_TRUE Specifies that the property is to be set to the TRUE state.

PROPERTY_FALSE Specifies that the property is to be set to the FALSE state.

You can **reset** the value of the property to the value originally established for it at design time only if the parameter is a

non-numeric constant by entering two single quotes with no space between: ". For example, SET_ITEM_PROPERTY('DEPTNO', FORMAT_MASK, "); would reset that forma mask to its design-time value.

Χ

Specifies the NUMBER value of the x coordinate or the width, depending on the property you specified. Specify the argument in form coordinate system units.

У

Specifies the NUMBER value of the y coordinate or the height, depending on the property you specified. Specify the argument in form coordinate system units.

Usage Notes

The following issues can affect your decisions on how to apply certain property values to an item:

- validation of property changes
- propagation of property changes

Validation of Property Changes

When you specify a change through the SET_ITEM_PROPERTY built-in, Oracle Forms validates the change before it adjusts the property. If the change is validated, Oracle Forms makes the change and leaves it in effect until another SET_ITEM_PROPERTY changes the same property or the current form is exited.

Illegal Settings

If the change is not validated, Oracle Forms issues an error message. You cannot use SET_ITEM_PROPERTY to set the following item properties true or false, given the following target item conditions.

	You cannot set this property parameter	To this restricted setting	If this target item condition is true:
(All)		true/false	NULL-canvas item (item's canvas property is null)

ENABLED	true/false true	current itemVisible item property is false
INSERT_ALLOWED		Enabled item property is falseVisible item property is false
NAVIGABLE	11 40/14100	current itemVisible item property is false
QUERYABLE (Query Allowed)	true	Visible item property is false
UPDATE_ALLOWED		Enabled item property is falseConceal Data item property is true
UPDATE_NULL (Update if NULL)	true	Enabled item property is falseConceal Data item property is true
VISIBLE	true/false	• current item

Oracle Forms does not consider the current contents of an item before allowing a property change. If SET_ITEM_PROPERTY changes an item property that would affect how Oracle Forms validates the data in an item (for example, FIXED_LENGTH or REQUIRED), the validation consequences are not retroactive. The new validation rules do not apply to the item until Oracle Forms next validates it under normal circumstances.

For example, suppose the application has a required text item, such as Employee ID. In the application, the end user needs to be able to leave this item (behavior not allowed for a REQUIRED item), so you temporarily set the REQUIRED property to False. At this point, Oracle Forms marks an existing NULL value as VALID. Later in the application, when you set the REQUIRED property to true again, Oracle Forms does not automatically change the VALID/INVALID marking. In order to have a NULL value marked as INVALID (expected for a REQUIRED item), you must make a change in the item that will cause Oracle Forms to validate it, such as:

IF :block.item IS NULL
THEN :block.item := NULL;

Propagation of Property Changes

You can only specify a change to one item property at a time through the SET_ITEM_PROPERT Built-in. However, one SET_ITEM_PROPERTY statement can cause changes to more than one item property if the additional changes are necessary to complete, or propagate, the intended change. This is included primarily for compatibility with prior versions.

The following table shows the SET_ITEM_PROPERTY settings that cause Oracle Forms to propagate changes across item properties:

Setting this property parameter	To this setting	Also causes these propagated changes:
ENABLED	False	 sets the Navigable item property to False sets the Update_Null item property to False sets the Updateable item property to False
VISIBLE	False	 sets the Enabled and Navigable item properties to False sets the Updateable item property to False sets the Update_Null item property to False sets the Queryable item property to False
UPDATEABLE	True	 sets the Update_Null item property to False
UPDATE_NULL	True	sets the Updateable item property to False

SET_ITEM_PROPERTY Examples

```
/*
** Built-in: SET ITEM PROPERTY
** Example: Change the icon of an iconic button dynamically
** at runtime by changing its icon_name. The user
** clicks on this button to go into enter query
** mode, then clicks on it again (after the icon
** changed) to execute the query. After the query
** is executed the user sees the original icon
** again.
** Trigger: When-Button-Pressed
* /
DECLARE
it id Item;
BEGIN
it_id := Find_Item('CONTROL.QUERY_BUTTON');
IF :System.Mode = 'ENTER-QUERY' THEN
/*
** Change the icon back to the enter query icon, and
** execute the query.
* /
Set_Item_Property(it_id,ICON_NAME,'entquery');
Execute_Query;
ELSE
/*
** Change the icon to the execute query icon and get
** into enter query mode.
Set_Item_Property(it_id,ICON_NAME,'exequery');
Enter_Query;
END IF;
END;
```