

CREATING OBJECT SELECTION SETS

Editing AutoCAD entities involves selection sets. Selection set creation is the process of selecting an entity or group of entities for editing. The methods used by AutoCAD for creating selection sets are Picking, Window, Crossing Window, Wpolygon, Cpolygon, Fence, Last, Previous, and All. AutoCAD uses implied windowing features (when the system variable PICKAUTO is set to one), and entity cycling (using the CTRL key) as alternate methods of creating selection sets.

REMOVING OBJECTS FROM SELECTION SET

Hold the SHIFT key down while selecting (picking, crossing window...etc.). Note, **PICKADD** must be set to 1.

ADD SELECTED (NEW – RELEASE 2011)

With the ADDSELECTED command, you can create a new object with the same object type as a selected object. Simply select an object in the drawing, then right-click and select Add Selected. AutoCAD will proceed with the commands, and settings, needed to ‘add’ one of the selected objects into the drawing (very cool!). Certain objects have special properties that are supported in addition to its general properties.

SELECT SIMILAR (NEW – RELEASE 2011)

Selects similar objects of the same type based on specified matching properties, such as the color or block name. Simply grip select an object, like a donut, line, circle...etc., then right-click and select Select Similar. AutoCAD will group into a “selection set” every object in the drawing that meets the properties criteria of the selected object for editing. Acts like Quick Select, but easier and faster to use.

PICKING

The user selects the items for editing using the pickbox (the size of the pickbox can be adjusted using the PICKBOX system variable). Pressing a return key completes the selection set process, and terminates AutoCAD’s “select objects” prompt.

WINDOW

The user enters “W” at the “select objects” prompt and creates a window (continuous linetype) using two diagonal points.

Only entities that are ENTIRELY enclosed in the window are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt.

CROSSING

The user enters "C" at the "select objects" prompt and creates a window (highlighted linetype) using two diagonal points. ANY entities crossing the lines comprising the crossing window are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt.

NOTE: Because AutoCAD's PickAuto system variable is on by default, the user can omit entering the "W" or "C" denoted above. When creating the Window or Crossing window if the window is dragged to the right a **Window** is created, if dragged to the left a **Crossing Window** is created.

ENTITY CYCLING

Entity cycling is required to select and underlying entity when two AutoCAD entities lie on top of each other. This occurrence is referred to as stacking. Depressing the **SHIFT+SPACEBAR** (after release 2008) key when picking the top entity invokes **entity cycling**. The user then continuously depresses the pick button. AutoCAD will highlight and cycle through each entity in the stack as the pick button is depressed. When the entity desired for editing is highlighted the <enter> key is selected and the entity is added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt

SELECTION CYCLING (NEW – RELEASE 2011)

Selection cycling allows you to select objects that are overlapping. You can configure the display settings of the selection cycling list box. Simply select the object you want from the dialog box that pops up when you select overlapping objects. To filter the *type* of subobjects displayed (vertices, edges, or faces) use the **SUBOBJSELECTIONMODE** system variable.

FENCE

The user enters "F" at the "select objects" prompt and creates an irregular shaped, open end, line. ALL entities crossing the lines of the fence line are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt

ALL

The user enters "ALL" at the select objects prompt. All entities in the drawing are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt. CAUTION: Objects residing on "off" status layers (opposed to those layers that have a "frozen" status) are made part of the selection set when using the **ALL selection process** option.

WPOLYGON

The user enters "WP" at the "select objects" prompt and creates a multi-faceted polygon. Only entities that are ENTIRELY enclosed in the window are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt.

CPOLYGON

The user enters "CP" at the "select objects" prompt and creates a multi-faceted polygon. ANY entities crossing the lines comprising the crossing window are added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt

LAST

When ever an entity is created it is stored in memory as the "Last" entity. Using the "Last" option at the "select objects" prompt when creating a selection set will add that last item created to the selection set. For example: A circle is created, then needs to be moved. The user enters the MOVE command and types "L" for last, the circle just created is added to the selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt

PREVIOUS

When ever an entity or group of entities has been selected and used during an editing command it is stored in memory as the "Previous" selection set. If the entities in that set are needed in the next selection set, the user may type "P" at the "select objects" prompt. The previous selection set becomes part of the current selection set. Pressing a return key completes the selection set process, and terminates AutoCAD's "select objects" prompt

REMOVING OBJECTS FROM SELECTION SET

Hold the SHIFT key down while selecting (picking, crossing window...etc.).
Note, **PICKADD** must be set to 1.

RELATED OBJECT SELECTION SYSTEM VARIABLES

NOUN/VERB EDITING METHODS

There are four AutoCAD system variables that control how the user interfaces with AutoCAD. They are **PICKFIRST**, **PICKAUTO**, **PICKDRAG**, & **PICKADD**. These interface methods are used when creating a selection set, adding or removing entities from a selection set, or activating a command sequence by first selecting the entity(s) to be worked on followed by the command (noun/verb).

PICKFIRST: Defaults to: 1

Controls the method of object selection so that you select objects first and then use an edit or inquiry command.(enables noun/verb capabilities).

PICKFIRST = 0: Disables

PICKFIRST = 1: Enables

PICKAUTO: Defaults to: 1

Controls automatic windowing when the Select objects prompt appears (implied windowing).

PICKAUTO = 0: Disables

PICKAUTO = 1: Draws a selection window (both window and crossing window) automatically at the Select objects prompt.

PICKAUTO = 2 (NEW FOR 2012!)

When PICKAUTO is set to 2, AutoCAD still selects the object if you click and release on the object. And, it still implies a window or crossing selection if you click and drag on a blank part of the drawing. But it also allows you to click on an object and, while keeping the mouse button pressed, drag to imply a window or crossing selection.

PICKDRAG: Defaults to: 0

Controls the method of drawing a selection window (press and drag method).

PICKDRAG = 0: Draws the selection window by clicking the mouse or digitizer at one corner and then at the other corner.

PICKDRAG = 1: Draws the selection window by clicking at one corner, holding down the mouse or digitizer button, dragging, and releasing the mouse or digitizer button at the other corner.

PICKDRAG = 2 (NEW FOR 2012!)

The PICKDRAG system variable has been updated in AutoCAD 2012 to include a new option. Traditionally (before AutoCAD 2012), you had to choose between two methods for specifying a selection window. When PICKDRAG is set to 0, you create a selection window by picking (and releasing) to specify the first point and then picking (and releasing) to specify the second point. If PICKDRAG is set to 1, you pick the first point and continue holding down the mouse button as you drag. Releasing the mouse button specifies the second point of the selection window. A new option in AutoCAD 2012, PICKDRAG = 2, combines both of these behaviors so you don't have to choose!

PICKADD: Defaults to 1

Controls additive selection of objects.

PICKADD = 0: Disables PICKADD. The objects most recently selected, either by an individual pick or windowing, become the selection set. Previously selected objects are removed from the selection set. Add more objects to the selection set by holding down the SHIFT key while selecting.

PICKADD = 1: Enables PICKADD. Each object selected, either individually or by windowing, is added to the current selection set. To remove objects from the set, hold down the SHIFT key while selecting.

PICKSTYLE: Defaults to: 1

Controls use of group selection and associative hatch selection.

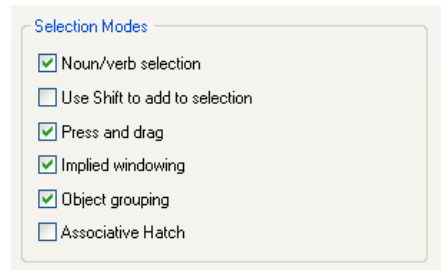
0 = No group selection or associative hatch selection

1 = Group selection

2 = Associative hatch selection

3 = Group selection and associative hatch selection

AutoCAD provides a dialog box method of toggling the above user interface system variables. The **DDSELECT** command provides access to the dialog box. Once enabled the settings “check boxes” equate to the system variables listed below:



UNDO/REDO ZOOM AND PAN

You can now undo or redo consecutive zoom and pan operations in a single action.

Click Tools menu > Options > User Preferences tab and select "Combine zoom and pan commands".

OTHER INTERFACE ENHANCEMENTS

- AutoComplete functionality for commands and system variables entered at the command line.
- A new Recent Input option (shown as a cascade on the **CMCOMMAND** *context menu*) lets you access recently used **commands** and **values** including points, distances, angles, and strings in a context-sensitive fashion, depending upon the type of prompt.