Object Groups

A group is a combination of multiple objects made to act as a single object. By default, selecting one object in a group causes the entire group to become selected. Groups are saved with the drawing. Objects can be members of more than one group, and you can nest groups, which means a group can contain another group. You can use nesting to place smaller groups into larger groups for easier editing.

An object that exists in multiple groups may create an unexpected situation, however. For example, if you group a line and an arc, and then group the arc with a circle, moving the first group moves the line and arc, and moving the second group moves the arc and circle.

Creating a Group

The GROUP command provides an easy way to group objects. Access the GROUP command and select the objects to group. Use the Name option to assign the group a descriptive name. You do not have to name a group in order to create it. AutoCAD gives unnamed groups a default name in the format of "Ax", where x is an integer value that increases with each new group. For example, the sixth group would be "A6".

You can also add a description of the group using the Description option. After you select objects to group and add a name and description, right-click or press [Enter] or the space bar to create the group.

Using the GROUPEDIT Command

The GROUPEDIT command provides options to add objects to or remove objects from an existing group, or to change the name of a group. Access the GROUPEDIT command and select the group to edit. The Name option allows you to enter the name of the group to edit. After you specify the group to modify, use the Add objects option to select objects to add to the group, or use the Remove objects option to select objects to remove from the group. Right-click or press [Enter] or the space bar to complete the edit. Choose the RENAME option to enter a new name for the group. Press [Enter] or the space bar, or right-click and select Enter to finish renaming.
Managing a Group

Access the Group Manager to create, edit, and further manage groups using the Object Grouping dialog box, shown in Figure 13B-1. The text box displays the Group Name and shows whether the group is selectable. If a group is selectable, pick any object in the group to select the entire group. Make a group unselectable to edit individual objects within the group.

In the Group Identification area, pick the Find Name button to display a list of all groups associated with an object. When you pick the Find Name button, the Pick a member of a group: prompt appears. When you pick an object, the Group Member List dialog box lists any groups associated with the object.

Select the Highlight button to specify a group name and highlight all members of the group in the drawing window. Pick the Continue button or press [Enter] to return to the Object Grouping dialog box. Pick the Include Unnamed check box to list unnamed groups with named groups. You can rename unnamed groups using the Rename option.

The Create Group area contains the options for creating a new group. Pick the New button to create a new group from the selected objects using the name entered in the Group Name: text box. Select the Selectable check box to set the initial status of the Selectable value as Yes for the new group. The Selectable list indicates the status. Deselect the Selectable check box to specify No in the Selectable list. You can also change this option later. The Unnamed check box indicates whether the new group includes a name. If Unnamed is checked, AutoCAD assigns its own default name as previously described.

The Change Group area of the Object Grouping dialog box contains options for changing a group. Pick the Remove button to remove objects from a group. Select the Add button to add objects to a group. Pick the Rename button to change the name of an existing group, including unnamed groups. Select the Re-Order button to display the Order Group dialog box. Objects are numbered in the order you selected them when you defined the group. The first object is 0, not 1. The Order Group dialog box allows you to reorder objects within the group. For example, if a group contains a set of instructions, you can reorder the instructions to create command paths.

Pick the Description button of the Object Grouping dialog box to update the group with the new description entered in the Description: text box. Select the Explode

Figure 13B-1.
The elements of the Object Grouping dialog box.
button to delete the selected group definition, but not the objects in the group. The
group name is removed, and the original group is exploded. Copies of the group
become unnamed groups. Select the **Include Unnamed** check box to display and allow
exploding of unnamed groups, if needed. The **Selectable** button toggles the selectable
value of a group.

**Group Selection**

The **PICKSTYLE** system variable controls whether you can only select a group as a
group of objects, or as individual objects within a group. By default, when you pick a
group, the group acts as a single object. To be able to select specific objects assigned to
a group, deselect the **Group Selection On/Off** button in the **Groups** panel of the **Home**
ribbon tab. Editing objects in a group affects the group. For example, with group selec-
tion turned off, you can erase or move an object in a group to erase the object from or
move the object within the group. To deactivate groups, deselect the **Object grouping**
check box in the **Selection Modes** area of the **Selection** tab in the **Options** dialog box.

**Group Boundary Box Display**

The **GROUPDISPLAYMODE** system variable controls whether a boundary box and
grip appear when you select a group. By default, when you pick a group, a boundary
exists around the extents of the group, and a grip box appears at the center of the
boundary. See **Figure 13B-2**. Use the boundary box as a frame of reference, and use
the grip to perform standard editing operations, such as moving the group. The easiest
way to hide the boundary box and grip is to deselect the **Group Boundary Box** button
in the **Groups** panel of the **Home** ribbon tab.

**Figure 13B-2.**
By default, AutoCAD shows a boundary box around the extents of a group and a grip at
the center of the boundary. This example shows the objects of an exterior garage elevation
grouped for easy selection.
Ungrouping Objects

The **EXPLODE** command does not ungroup a group. Access the **UNGROUP** command and select the objects to ungroup. The **Name** option allows you to enter the name of the group to ungroup.

**Activity 13B-1**

Perform the following steps to practice working with groups:

1. Open a complex drawing that you created previously.
2. Save a copy of the drawing as ACT13B. The ACT13B file should be active.
3. Use the **GROUP** command to name and describe several different elements of the drawing as groups. For example, for a multiview drawing, use FRONT, TOP, and SIDE.
4. Use each element of the **Object Grouping** dialog box to see the effect on the groups you have named.
5. Resave the drawing.