AutoCAD and Its Applications BASICS

Supplemental Material—Chapter 13

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.

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, press [Enter] 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. Press [Enter] to complete the edit. Select the **REName** option to enter a new name for the group. Press [Enter] to finish renaming.



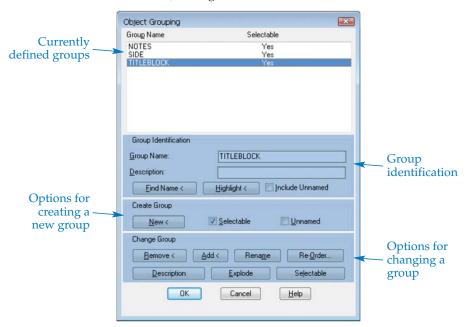
Managing a Group

Access the **Object Grouping** dialog box to create, edit, and further manage groups. See **Figure 13B-1**. The **Group Name** text box displays the name of the group 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.



Figure 13B-1. The elements of the **Object Grouping** dialog box.



Select the **Highlight** button to highlight all members of a 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** button.

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. Pick 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. Pick 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 as needed.

Pick the **Description** button of the **Object Grouping** dialog box to update the group with the new description entered in the **Description**: text box. Pick the **Explode** 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 selection turned off, you can alter 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.



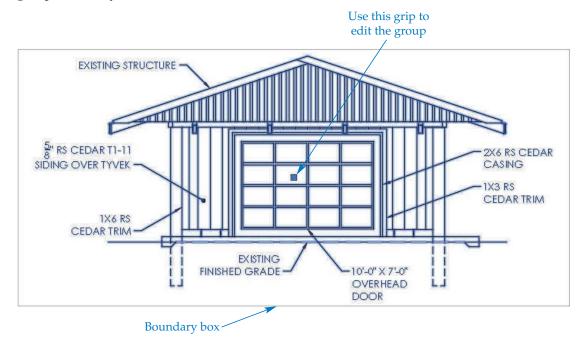
Group Boundary Box Display

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 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 Bounding 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 and close the file.