Additional Layer Commands

AutoCAD includes several layer commands in addition to the standard layer controls described in Chapter 5. This supplement introduces layer commands that help you work efficiently with layers. You can accomplish most of the same tasks using the Layer Properties Manager. Be sure you are comfortable performing these tasks using the Layer Properties Manager before using the additional layer commands.

Making an Object’s Layer Current

Use the LAYMCUR, or Make Object’s Layer Current, command to make the layer assigned to a selected object current. This is a quick way to make a layer current by referencing an object, without having to remember or search for the layer assigned to the object. Access the command and pick an object assigned to the layer to make the layer current.

Returning to the Previous Layer

The LAYERP, or Layer Previous, command allows you to undo the previous change made to any layer property. The Layer Previous command does not affect layer name changes and does not recreate deleted or purged layers. This command affects layer operations only. Use the Layer Previous command after using draw, modify, and view commands to undo the last change you made to a layer setting without affecting any other operation.

Walking through Layers

Access the LAYWALK command to open the LayerWalk - Layers: n dialog box, shown in Figure 5A-1A. The list box shows all layers in the drawing. Select a layer from the list to turn off all the layers except the selected layer. This provides a means for you to “walk through” a drawing to see which objects are drawn on which layers. You can select multiple layers to display. You can also pick the Select objects button to enter the drawing window and select an object to isolate the layer used to draw the object.
The LayerWalk - Layers: n dialog box. A—Selected layers display in the drawing area. B—Use a filter to list only those layers that match the filter criteria.

The LayerWalk - Layers: n dialog box contains other functions, including a Purge button to purge unused layers from the drawing file. You can also type a name, or a partial name using the * wildcard character, in the filter drop-down list to filter for specific layers. Layers meeting the filter criteria are displayed in the list box. See Figure 5A-1B. Deselect the Restore on exit check box to set layer status according to the settings you specify using the LAYWALK command.

Matching Layers

The LAYMCH, or Layer Match, command allows you to change layers assigned to objects to the same layer assigned to a different object. Access the command, select the objects you want to change to a different layer, and press [Enter]. Then select an object assigned to the layer you want to match. The layers of the objects you pick first change to match the layer of the object you pick second. An alternative is to use the Name option after selecting the objects whose layers will change. This option displays the Change to Layer dialog box, where you can select a different layer.
Changing Objects to the Current Layer

Access the LAYCUR, or Change to Current Layer, command to assign the current layer to selected objects. You can accomplish the same process by selecting an object, then picking a layer from the Layer drop-down list in the Layers panel of the Home ribbon tab.

Copying Objects to a New Layer

The COPYTOLAYER command combines the COPY command and the Layer Match command. Copy objects to a new location and at the same time place them on a layer assigned to a different object. Access the Copy Objects to New Layer command, select the objects to copy to another layer, and press [Enter]. Then use the Name option to select a different layer using the Copy to Layer dialog box, or select an object assigned to the layer you want to match. The layers of the objects you pick first change to match the layer of the object you pick second. After selecting the layer, you have the option of selecting a base point from which to copy the objects and a displacement point, or new location, for the copied objects.

Layer Isolate and Layer Unisolate

Use the LAYISO, or Layer Isolate, command to turn off or lock and fade all layers except for the layer assigned to selected objects. Access the Layer Isolate command to display the Select objects on the layer(s) to be isolated or [Settings]: prompt. Select the Settings option to describe how to isolate the selected layers. Pick the Lock and fade setting to lock and fade unisolated layers, or pick the Off option to turn off unisolated layers.

When you select the Lock and fade setting, a prompt asks you to enter a fade value between 0 and 90. After entering a fade value, pick objects assigned to the layers you want to isolate. All other layers lock and fade according to the specified fade value.

When you select the Off setting, the In paper space viewport use [Vpfreeze/Off]: prompt appears. Pick the VPfreeze option to freeze all unisolated layers in the active layout viewport, or pick the Off option to turn off all unisolated layers. Next, pick the objects on the layer or layers to be isolated. All other layers freeze or turn off according to the specified settings.

The LAYUNISO, or Layer Unisolate, command restores layers to their state before isolation. Any changes made during Layer Isolate remain. Layer Unisolate restores only those layers that were locked or turned off during the Layer Isolate function. Layers changed individually by changing settings in the Layer Properties Manager, or by other means, are unaffected.

The LAYVPI, or Isolate to Current Viewport, command is similar to Layer Isolate, except it freezes the selected layer in all layout viewports other than the current viewport. Chapter 29 describes layer control for layout viewports.
Merging Layers

Merging layers allows you to change all objects on specified existing layers to a different layer and purge the original layers from the drawing. To merge layers using the Layer Properties Manager, select the layers to merge and purge, and then right-click on the layers and select Merge selected layer(s) to ... to display the Merge to Layer dialog box. See Figure 5A-2. Select the layer to merge all layers to and pick the OK button. AutoCAD warns you of the pending merge operation and prompts you to continue.

The LAYMRG, or Layer Merge, command allows you to merge layers without using the Layer Properties Manager. To merge layers using this command, first select the objects on the layers you want to merge and purge and press [Enter]. Then use the Name option to select a layer using the Merge Layers dialog box, or select an object assigned to the layer to merge. AutoCAD warns you of the pending merge operation and prompts you to continue.

Layer Delete

The LAYDEL, or Layer Delete, command deletes all objects on a layer you select and deletes the layer from the drawing. To delete layers using this technique, use the Name option to select a layer using the Delete Layers dialog box, or pick an object assigned to the layer to delete. AutoCAD warns you of the pending deletion and prompts you to continue.

Figure 5A-2.
Use the Merge selected layer(s) to ... shortcut menu option to merge layers using the Layer Properties Manager.
Other Layer Options

Several other layer commands may help you work on drawings that contain many objects in a small area that exist on separate layers:

- **Layer Off (LAYOFF)** turns off the layer assigned to the selected object.
- **Turn All Layers On (LAYON)** turns on all layers that are off.
- **Layer Freeze (LAYFRZ)** freezes the layer assigned to the selected object.
- **Thaw All Layers (LAYTHW)** thaws all frozen layers.
- **Layer Lock (LAYLCK)** locks the layer assigned to the selected object.
- **Layer Unlock (LAYULK)** unlocks the layer assigned to the selected object.