Chapter 23
External Reference Files

External Reference Files Overview 23.1

Attaches, overlays, lists, binds, detaches, reloads, unloads, renames, and modifies paths to external references (xrefs) in the current (or host) drawing.

1. **Choose** Insert, External Reference...

or

2. **Click** the Xref Icon from the Reference Toolbar. 

or

3. **Type** XREF at the command Prompt. Command: **XREF**

The following are Xref characteristics:

-An external reference file is known as an “Xref”.

-Current drawing contains only a “pointer”, the path and filename, to the Xref.

-The current drawing does not increase much in size when it contains an Xref.

-The Xref is reloaded each time the current drawing is loaded, thus always showing the latest revision of the Xref.

-Xrefs import their linetypes, layers, text styles, dimstyles, views, ucs’s, vports, and blocks into their current drawing.

-Each Xref named object is prefixed with the xref drawing name and a pipe “|” symbol.

(i.e. HOUSE|A-WALL for drawing house.dwg and layer a-wall)

- Xdep stands for external reference dependent objects.

- Xref’s layers can be turned on/off in the current drawing.

- Layer zero(0) resides on layer zero(0) of the current drawing.

- Xrefs can be bound to the current drawing, in which case they become blocks.

-Xref layers cannot be made current the the drawing they are xreferenced into.

- Xrefs can be snapped to.

-Xref entities cannot be individually modified in the current drawing.

-Xrefs can be plotted.

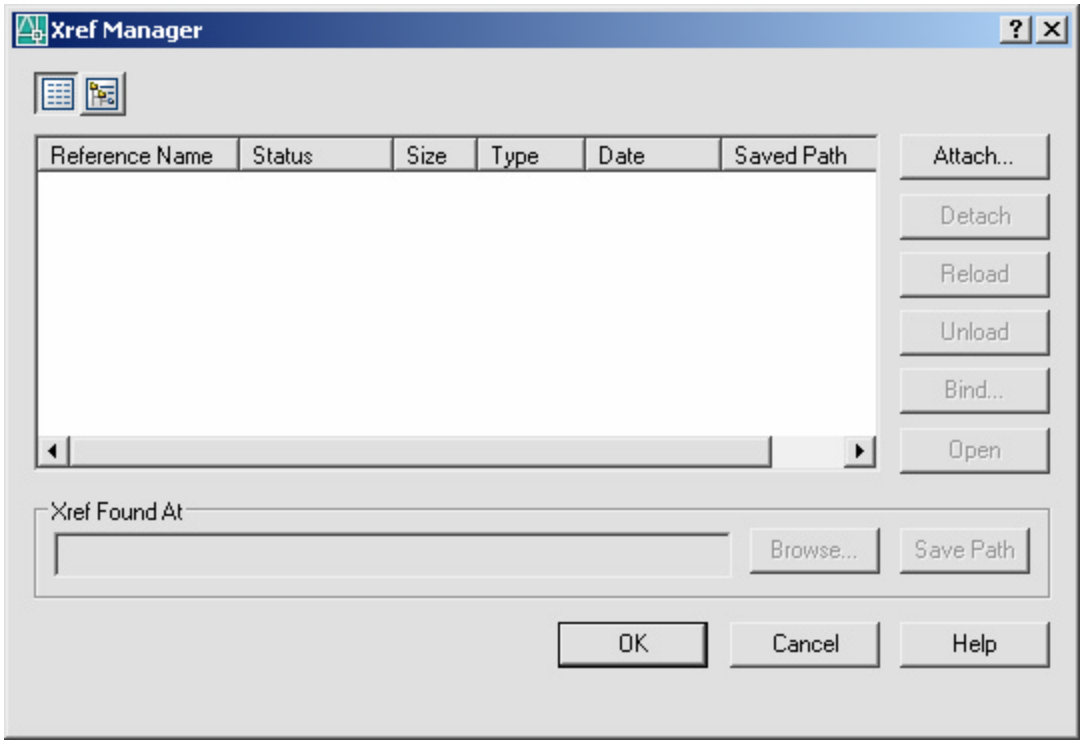
-Xrefs can be detatched from the current drawing and will disappear.

-The current drawing pointer, file and pathname can be changed.

-Xrefs can be re-loaded during the current drawing session.

-Xrefs can be nested.

-Xrefs can be clipped to show parts of the reference files.



Attaching Xrefs 23.2

Attaches, overlays, lists, binds, detaches, reloads, unloads, renames, and modifies paths to external references (xrefs) in the current (or host) drawing.

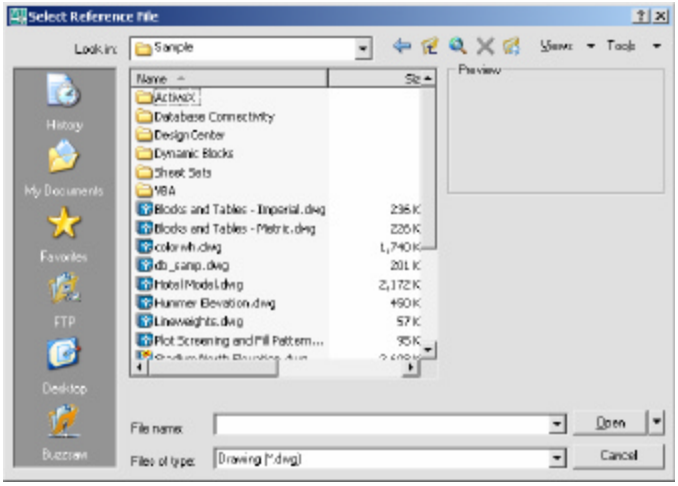
1. **Choose** Insert, External Reference

or

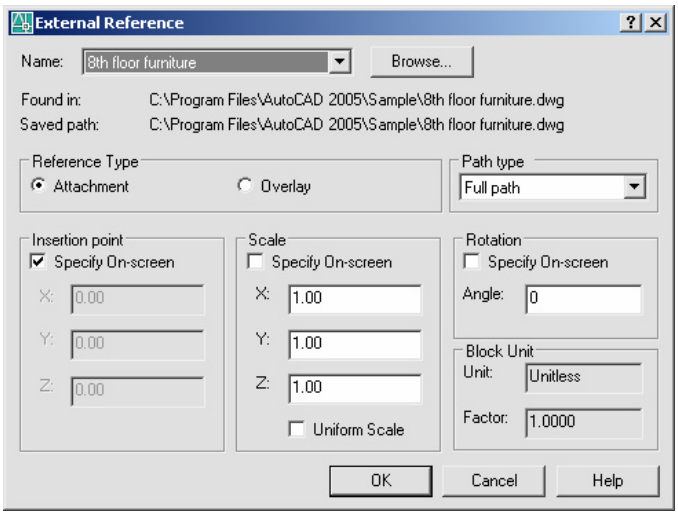
2. **Type** XATTACH at the command prompt.

or

3. **Click** the Xref Attach Icon from the Reference Toolbar. 
4. **Choose** a drawing name to attach.



5. **Specify** the insertion parameters.



Xref Layers 23.3

Layer Dialog Box

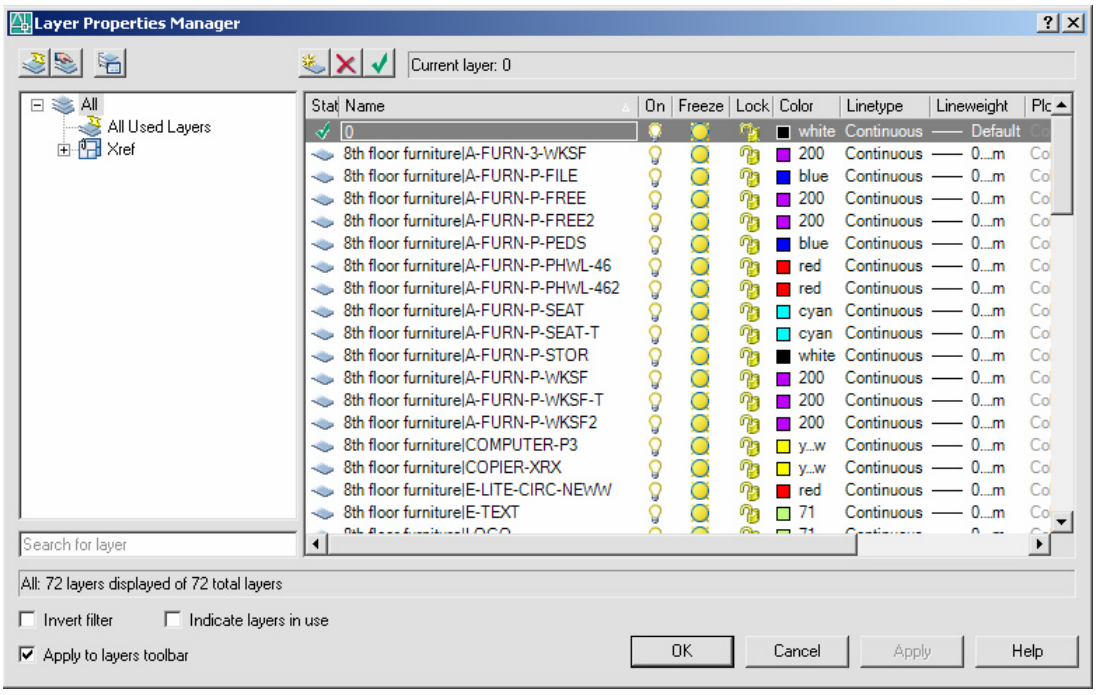
-Each Xref named object is prefixed with the xref drawing name and a pipe "|" symbol. (i.e. HOUSE|A-WALL for drawing house.dwg and layer a-wall)

-Xdep stands for external reference dependent objects.

-Xref's layers can be turned on/off in the current drawing.

-Layer zero(0) resides on layer zero(0) of the current drawing.

-Xref layers cannot be made current the the drawing they are xreferenced into.



Clipping Xrefs 23.4

Defines an xref or block clipping boundary and sets the front or back clipping planes.

1. **Choose** Modify, Clip, XRef

or

2. **Click** the Xclip Iconfrom the Reference Toolbar. 

or

3. **Type** XCLIP at the command prompt.

Command: **XCLIP**

Select objects: Other corner: 1 found

Select objects: **pick reference file**

ON/OFF/Clipdepth/Delete/generate Polyline/

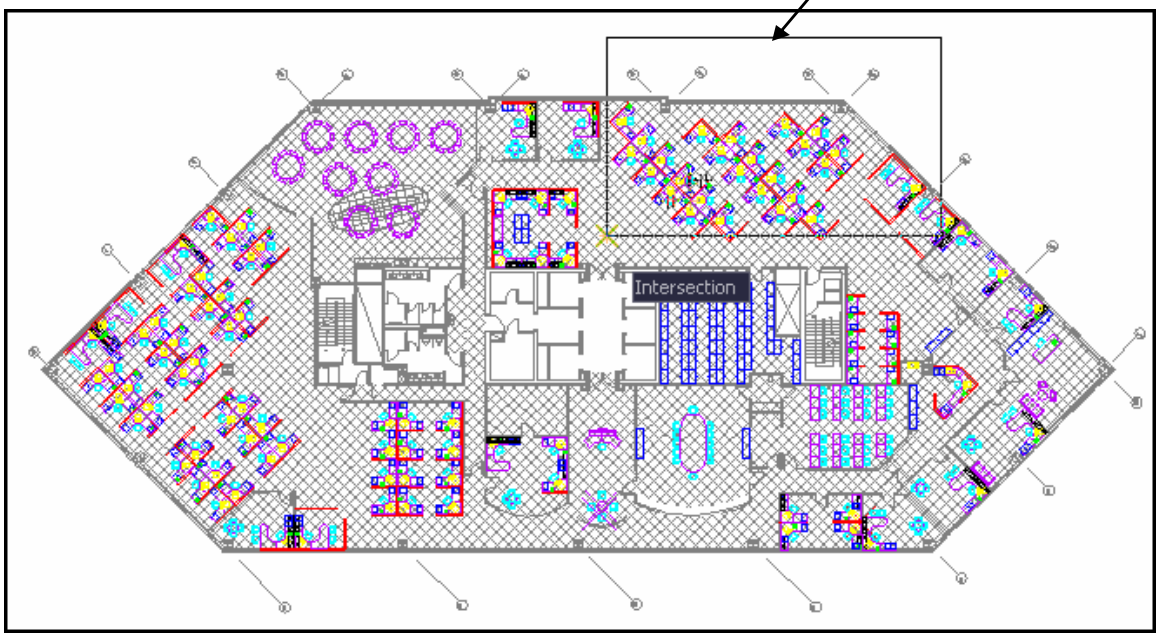
<New boundary>:

Specify clipping boundary:

Select polyline/Polygonal/<Rectangular>: First corner:

Other corner: **pick corners**

Defining a Clipping Boundary



Xclipframe controls visibility of xref clipping boundaries.

1. **Choose** Modify, Object, ExternalReference.

or

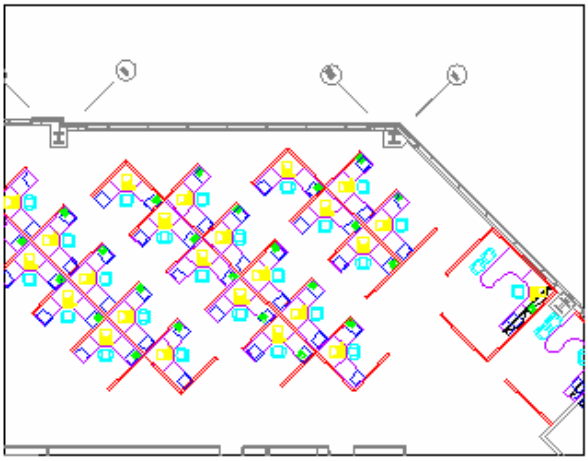
2. **Type** XCLIPFRAME at the command prompt.

Command: **XCLIPFRAME**

0 Clipping boundary is not visible

1 Clipping boundary is visible

Turning xclip frame on/off

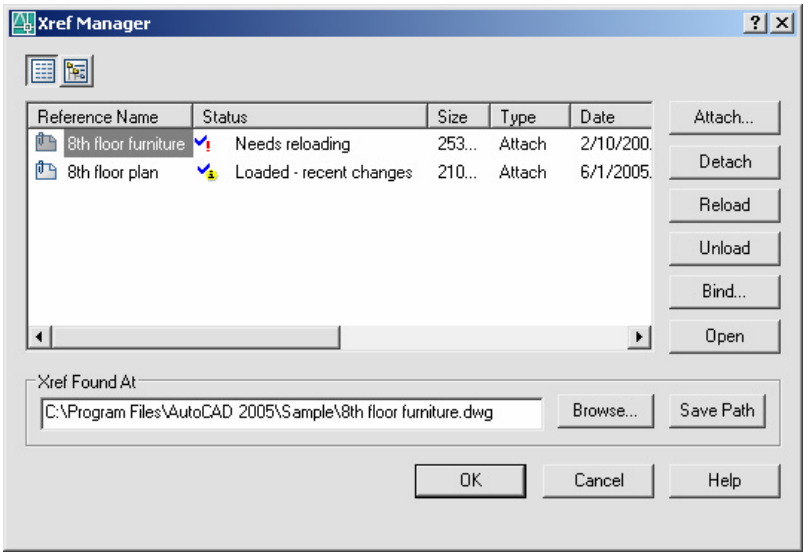


Binding Xrefs 23.4

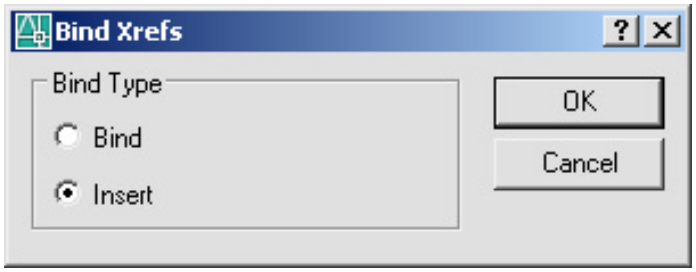
Converts Xreference files to block definitions in the current drawing. Associ- ated objects change names (i.e. the layer called HOUSE|A-WALL becomes HOUSE0A-WALL). Binding looses the connection to the referenced file. Xrefs can also be inserted like Wblocks.

To Bind an Xref:

1. **Choose** Insert, Xref Manager
2. **Choose** an xref name.
3. **Choose** the Bind option.



4. **Choose** Bind or Insert.
5. **Choose** OK.



The XBIND command is used to bind layers, blocks, linetypes, styles, and dimstyles of an attached xref without binding the entire xref.

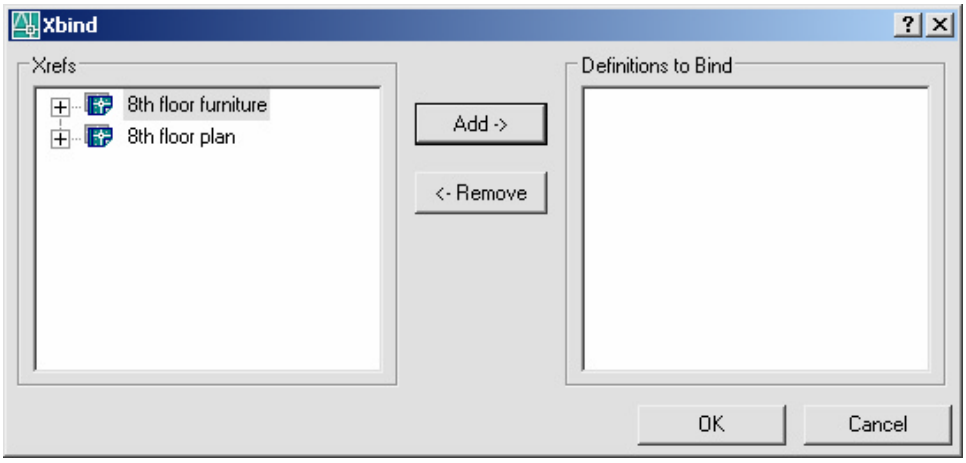
1. **Choose** Modify, Object, External Reference, Bind...

or

2. **Click** the Xbind Icon from the Reference Toolbar. 

3. **Type** XBIND at the command prompt.

Command: **XBIND**
Block / Dimstyle / LAyer / LType / Style:



Editing Xrefs (Xref Manager) 23.6

Detaching Xrefs

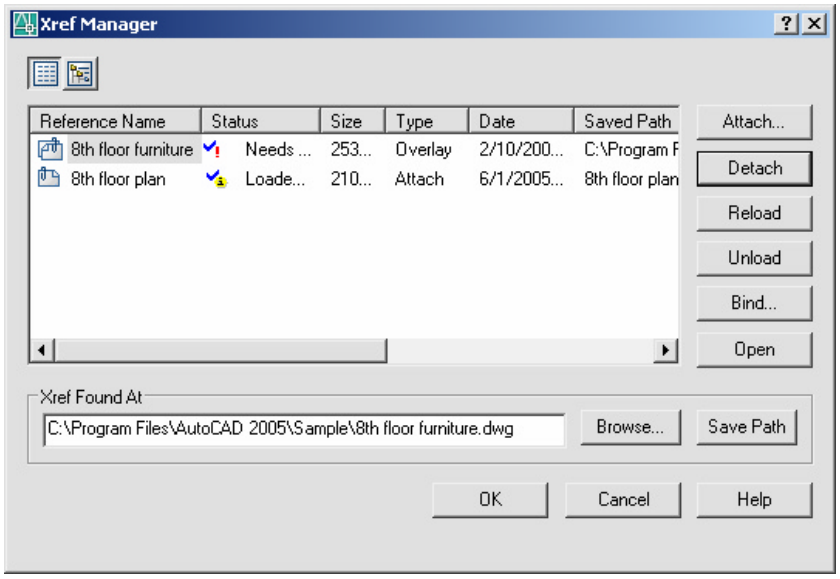
Detaches one or more xrefs from your drawing, erasing all instances of a specified xref and marking the xref definition for deletion from the symbol table.

1. **Choose** a drawing name to detach from the Xref Dialog.
2. **Choose** the Detach option.

Unload an Xref

Unloads one or more xrefs. Unloaded xrefs can be easily reloaded. Unlike detach,unloading does not remove the xref permanently. It merely sup- presses the display and regeneration of the xref definition, to help current session editing and improvement of performance.

1. **Choose** a drawing name to unload from the Xref Dialog.
2. **Choose** the Unload option.



Reload an Xref

Marks one or more xrefs for reloading. This option re-reads and displays the most recently saved version of the drawing.

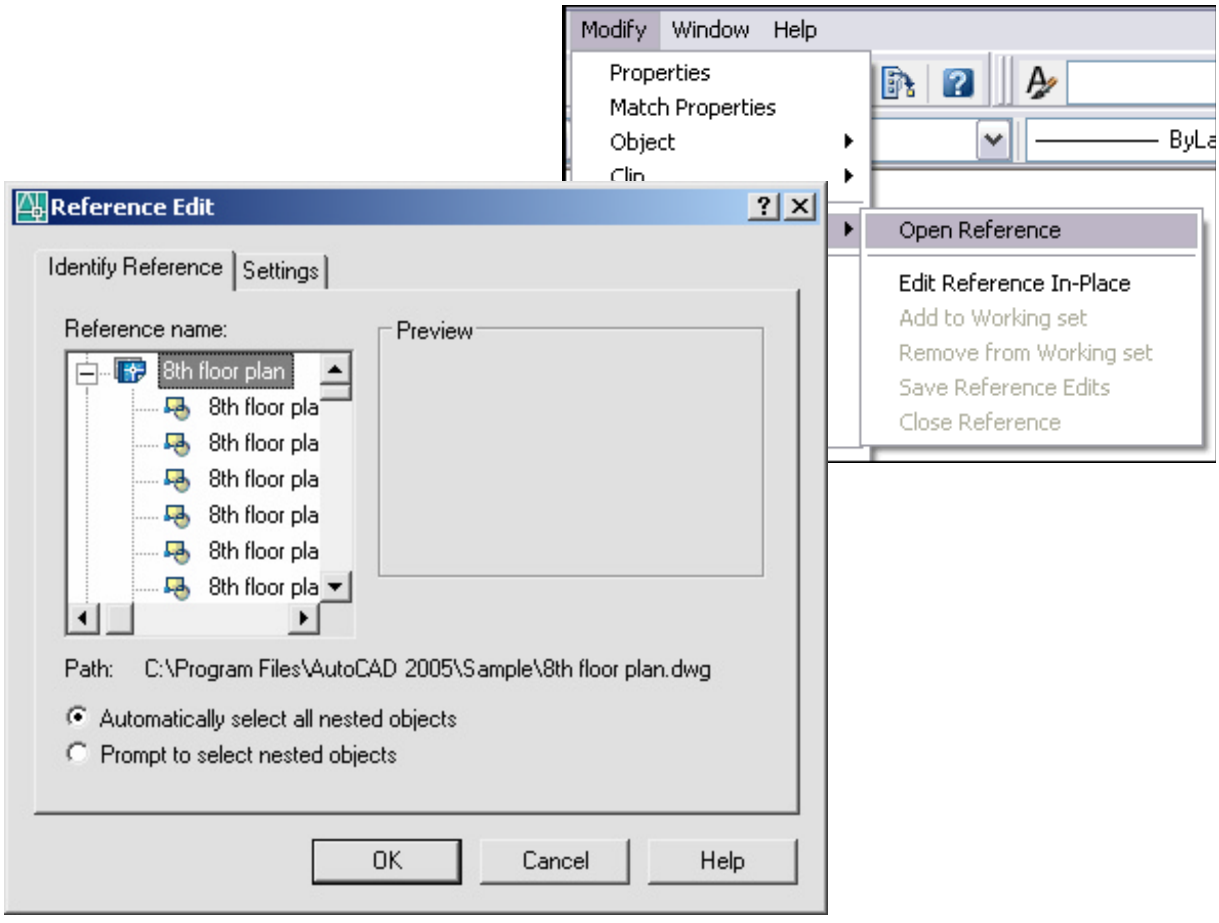
1. **Choose** a drawing name to reload from the Xref dialog.
2. **Choose** the Reload option.

Opening Xrefs to Edit

1. **Choose** Modify, Xref and Block Editing, Open Reference.

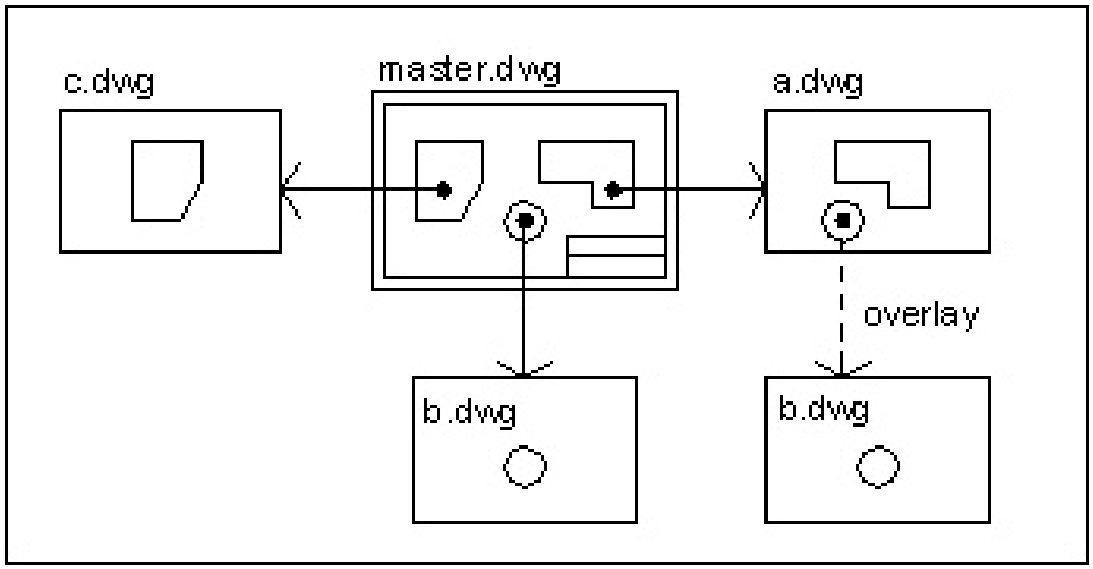
or

2. **Choose** Modify, Xref and Block Editing, Edit Xreference in Place.
3. **Edit** the objects as desired.
4. **Save** the edits with the following icons.



Overlay an Xref 23.7

Overlays are typically used when you need to view another drawing's geometry temporarily, but don't plan to plot using that data. In the following illustration, several people are working on drawings referenced by master.dwg. The person working on a.dwg needs to see the work being completed by the person working on b.dwg, but does not want to xref b.dwg because it would then appear twice in master.dwg. Instead, the person overlays b.dwg, which is not included when a.dwg is referenced by master.dwg.



1. **Choose** the Attach option from the Xref Dialog.

or

2. **Click** the Xref Attach Icon from the Reference Toolbar.
3. **Choose** a drawing name to attach.
4. **Choose** Overlay in the Attach Xref dialog box under Reference Type.

5. **Specify** the insertion parameters.