

External References

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What are External References (xrefs)?

- Similar to blocks
 - Blocks
 - Stored in drawing
 - Not updated if original drawing changes
 - External References (xrefs)
 - Not stored in drawing
 - Updated if original drawing changes
 - Cannot contain attributes

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Use of xrefs

- What can we use xrefs for?
 - Best use is for
 - Things that occur in several drawings
 - Things that change often
 - Reference
 - What does the first floor look like when I'm working on the second floor

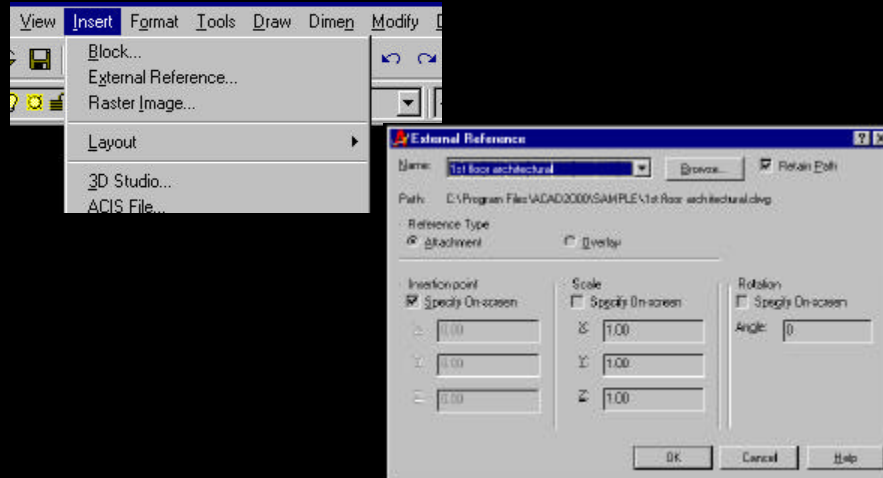
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Use xref command to attach



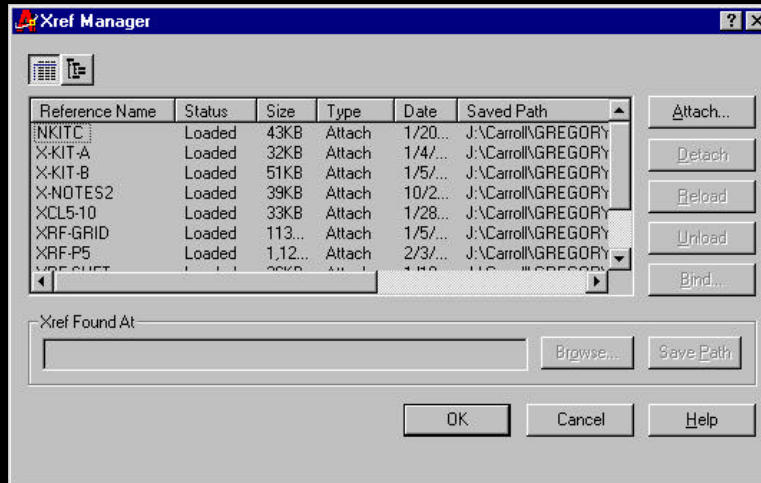
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List View



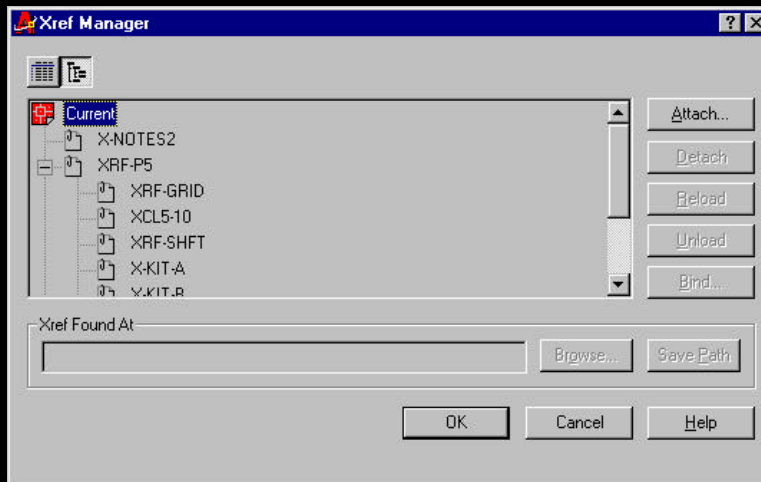
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Tree View



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Types of Attachment

- Attach
 - xref will display when parent is xref'ed into another drawing.
- Overlay
 - xref will not display when parent is xref'ed into another drawing.

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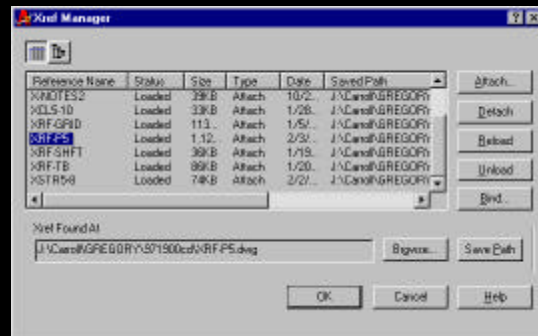
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Detach

- Removes xref from drawing totally
 - to restore you will have to re-attach



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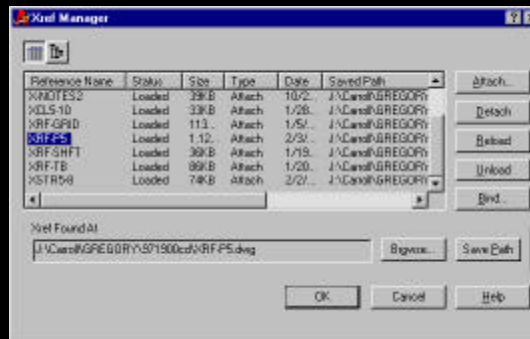
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Unload

- Unload the selected xref
- Can be reloaded by the reload button



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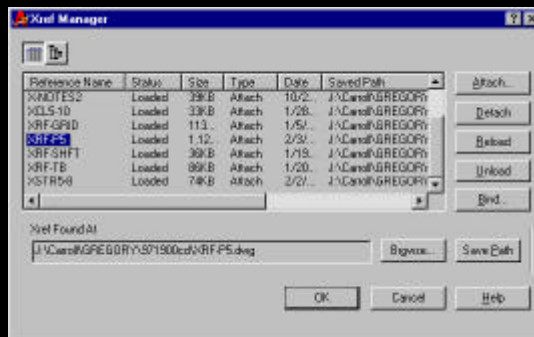
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Reload

- Reloads the selected xref



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Bind

- Bind
 - Binds the xref to the parent drawing
 - Blocks, layers, etc. names will be filename\$\$\$\$property
 - Insert
 - Inserts the xref like a block, i.e., layers, blocks will be named normally

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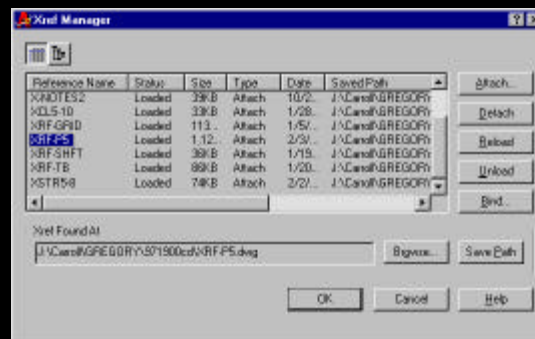
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Change path

- Change the path of the xref
- Useful for changing phases



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Pathing strategies

- Hard path
- Soft path
- Relative path

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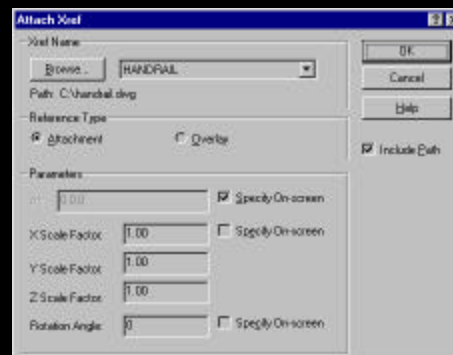
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Hard Path

- Hard Pathing Xrefs (Example: J:\hoytblk10\992325\cd\xrf-p1)
 - Advantages:
 - Xref will always be found.
 - Disadvantages:
 - Xref cannot be found if file is moved, or if directory is renamed.



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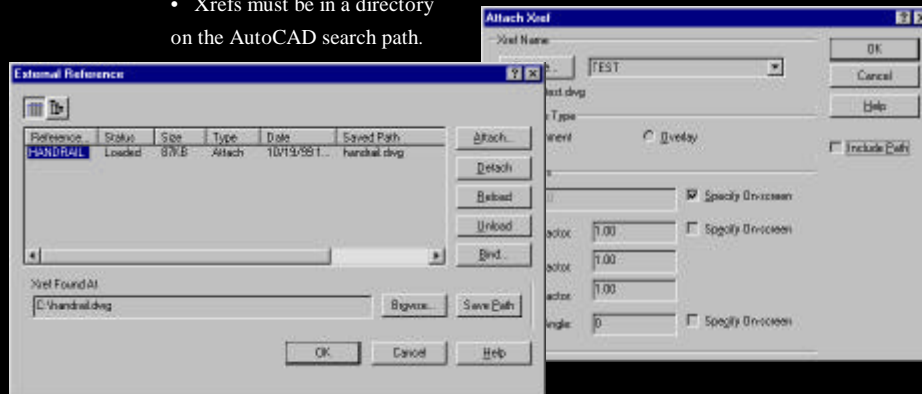
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Soft Path

- Soft Pathing Xrefs (Example: xrf-p1)
 - Advantages:
 - Xref can be found if directory is moved or renamed.
 - Disadvantages:
 - Xrefs must be in a directory on the AutoCAD search path.



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Relative Path

- Relative Pathing Xrefs (Example: ..\..\xrf-p1)
 - Advantages:
 - Xref can be found if file is moved, or if directory is renamed.
 - Disadvantages:
 - Complex and sometimes difficult to understand.

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Layers in xrefs

- Xrefname|layername
 - | is the pipe symbol
- Layer dialog can show only xref layers or no xref layers.

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Performance

- Demand Loading
 - Three settings
 - Disabled (default)
 - Enabled
 - Enabled with copy (Recommended)
 - Set in Options(A2K), Preferences(R14)

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Xref editing

- R14, xrefedit (Express tool)
 - Starts another session of AutoCAD
 - Reloads edited xref when completed
- A2K, refedit (core AutoCAD)
 - Allows user to edit xref without opening xref

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Redir

- Redefines hard-coded paths in xrefs, images, shapes, styles, and rtext.
 - Change hard path to soft path
 - Change hard paths
- Works in current drawing only
- Can be used in a script

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Xref path edit

- Redefines xref paths for a single drawing or multiple drawings.
 - Works in drawing other than current

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Remote text

- Remote Text (Rtext) objects display as normal text or Mtext objects do, but the source for the text is either an ASCII text file or the value of a DIESEL expression. You can edit an Rtext object with RTEDIT.

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Remote text

- ASCII text file
 - similar results to an xref
 - Text updates at regen if file contents change.
 - Hard to format

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Remote text

- DIESEL expressions
 - Drawing file: `$(getvar, "dwgname")`
 - The output looks like this:
Drawing file: 102-fp12.dwg
 - Drawing name: `$(getvar, "dwgprefix")$(getvar, "dwgname")`
 - The output looks like this:
Drawing file: C:\Projects\97-102\Arch\102-fp12.dwg
 - `$(edtime, 0, MON DD", " YYYY - H:MMam/pm)`
 - The output looks like this:
Sep 17, 1997 - 11:12pm
 - For a complete list of DIESEL functions, see the Catalog of DIESEL String Functions in Help.

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Rtedit

- Allows you to edit existing Remote Text (Rtext) objects.

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Images

- Attach raster images, bmp, jpg, tif, etc., similar to xrefs
- IMAGEADJUST controls the brightness, contrast, and fade values of images.
- IMAGEATTACH attaches an image object and definition.
- IMAGECLIP creates new clipping boundaries for an image object.
- IMAGEFRAME controls whether AutoCAD displays the image frame or hides it from view.
- IMAGEQUALITY controls the display quality of images.
- TRANSPARENCY controls whether the background of images is transparent or opaque.
- DRAWORDER changes the display order of images and other objects.

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