April 2006

Architectural Desktop 2006 – Automatic Elevations and Sections

This tutorial is accompanied with a Video <u>CADCLIP</u> which will be made available for downloaded for free at www.dgcad.com > Automatic Elevations and Sections

This quick tutorial explains the process and editing techniques involved to generate and manage ADT Elevations and Section. Elevations and Sections are very much the same type of object and follow the same type behaviour so we can user the terms interchangeably.

We should be using the 'Project Navigator' to generate the model that we will extract the Elevations and Sections from but to keep things simple for this exercise we will not use the project navigator. Amongst other things, the project navigator does the coordination between the reference bubbles and the sheet set.

Here is the basic model that we will use in 3d and in plan.
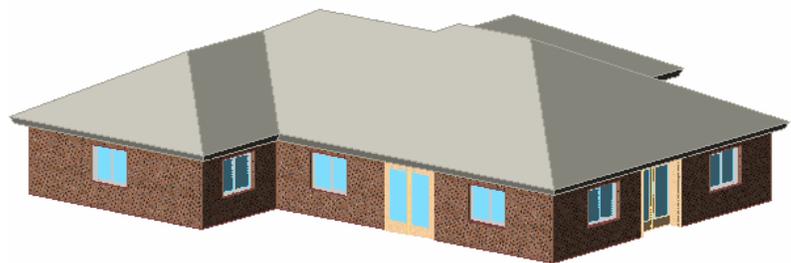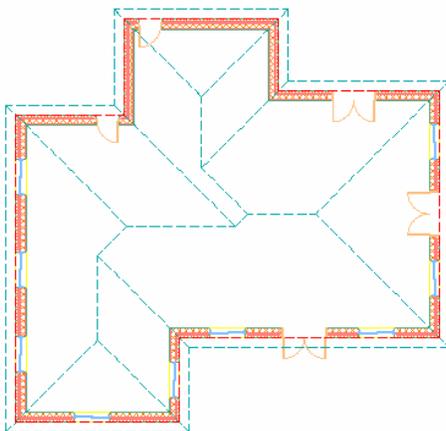
In plan view place an elevation callout off of the Callouts Palettes. There are several elevation and section callout symbols on the palette. PLEASE READ THE COMMAND LINE ….. during these few commands.
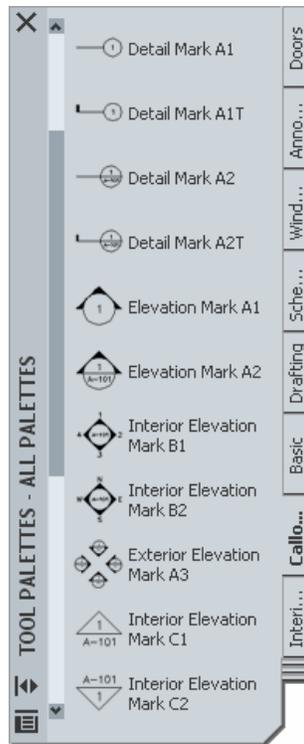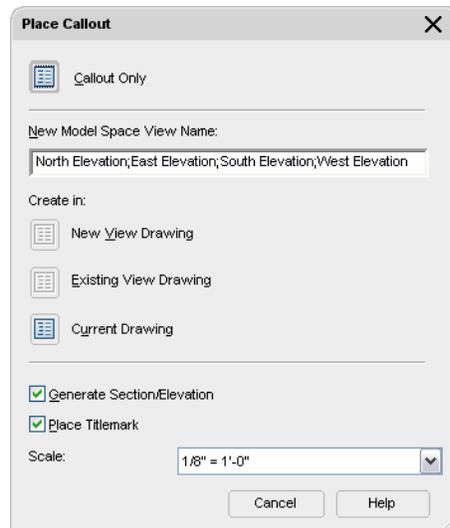
For exterior elevations I usually use the Mark A3 type callout. This will instantly create all 4 exterior elevations looking inward toward the building.

This tool prompts you to create a region by clicking two corners being the boundaries of the 4 elevations it will create. Basically encompass the entire model with a box as it prompts you. It can be gripped and stretched later.

Then you are prompted with the place callout dialog box. Notice there is no Ok or Done button. We will click the 'Current Drawing' button. I find this a little confusing. If you click Callout only it will only place the callout and not generate the elevation view. Setting the scale will be used for annotation purposes.

Place Callout ✕

📰 Callout Only

New Model Space View Name:

North Elevation;East Elevation;South Elevation;West Elevation

Create in:

📰 New View Drawing

📰 Existing View Drawing

📰 Current Drawing

☑ Generate Section/Elevation
☑ Place Titlemark
Scale: 1/8" = 1'-0" ▼

Cancel   Help

Then you are prompted to pick a point in the current drawing to place the new elevation view and then prompted to drag a point to place the physical distance between the 4 elevation views.

Then ADT generates 4 elevations automatically and the first part of the exercise is done.

You can then select the callout object in plan and see the limits of the view being generated. Use the grips to change the limits. Then Refresh.

VIEWNUMBER
SHEETNUMBER
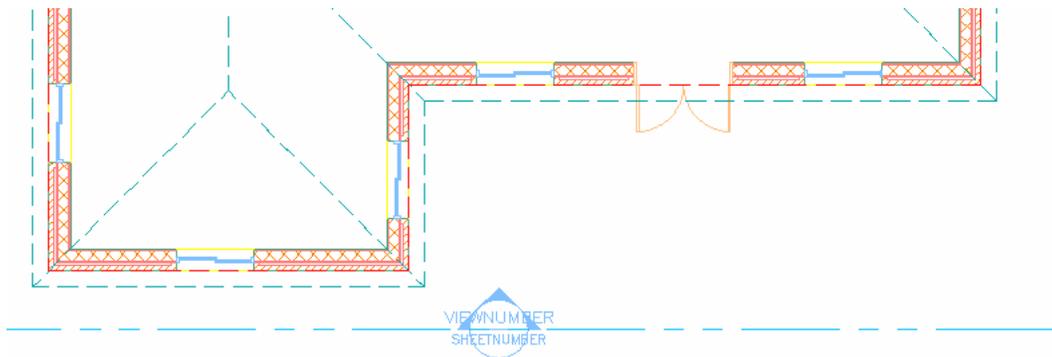
If you are not currently in a project (using the project navigator) you will only be able to place the newly generated Elevation View in the Current Drawing. Creating an elevation is like taking a snapshot in time of certain objects. Then ADT creates a special View. You can then refresh and regenerate the elevation as the model changes take place.

Once the elevation is created you can work with it.

If you alter or change objects that were within the original selection set in the model then all you need to do is 'Refresh' the elevation view. Refreshing has no prompts it just does it.

If you add new objects to the model (including doors and windows) you need to Regenerate the elevation and 'Select additional Objects'.

You can also Regenerate and 'Reselect' Objects. This regenerates that particular elevation view based only on the new Reselected Objects. Sometime this is the best route if things aren't cooperating.

Right click an elevation view and note the 4 options below.
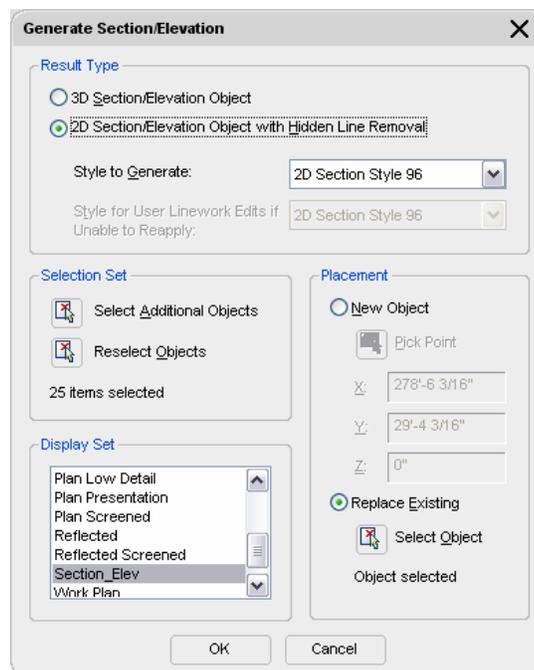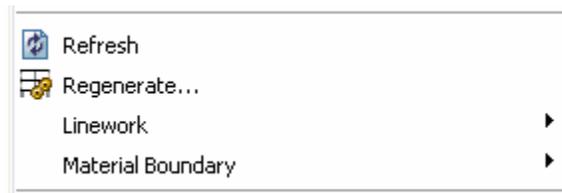
You can select more than one Elevation at a time when Refreshing and Regenerating.

Note that outside the Selection Set you can Replace the existing View or create a New View upon Placement.

Manual Linework can be accessed with a right click on the elevation view. Linework can be Edited and Merged into to Elevation or Section.

Refreshing and Regenerating will not effect the merged linework as long as you don't use the 'Replace Existing' option. You will see the In-Place Edit toolbar when in Linework Editing mode.


Linework can also be removed from the Elevation or Section by erasing it during In-Place Edit. All you can do to the linework generated by the callout is delete it. You cannot fillet, grip, extend, trim or anything. All you do is draw on top of it or delete it.

Manual linework does not have to be created during the In-Place Edit mode to be merged. Any linework can be merged.

Once manual linework is added and then merged to the view it moves and behaves like the rest of the view as one object.

When you merge linework you are prompted to select the linework component. This will control the merged linework display.
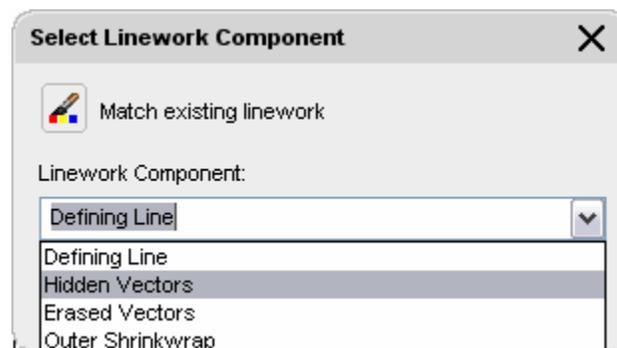
Elevations and Sections have a Style and the Display is much like the rest of the ADT objects in that respect.

Experiment with adding and removing objects to the model and Refreshing and Regenerating.

Then experiment with the Linework and Merges and note how they all work together.

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