

Memo

To: All CAD Operators
From: Tom Hanley
Date: 5/1/06
Re: Merging Files with Different Coordinate Systems

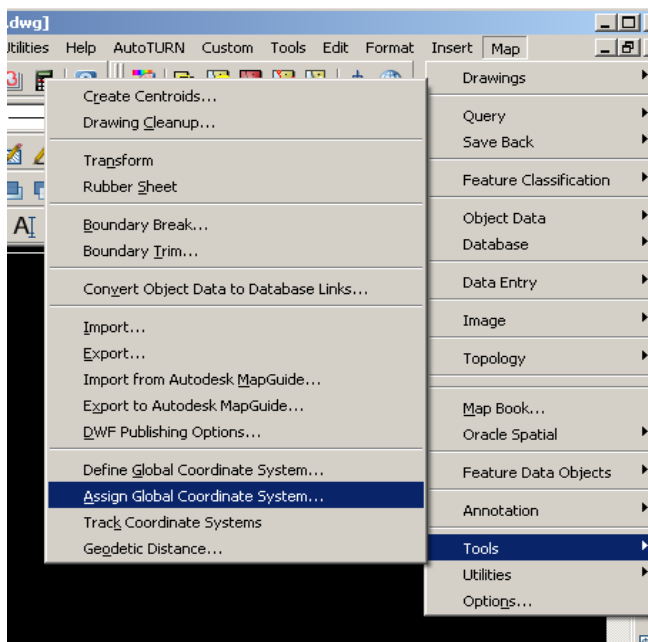
We have received new GIS and CAD data from the Orange County Water Dept on DVDs

The information is in NAD83 state plane coordinates New York (Feet). The older data was in the NAD27 system. Information based on different coordinate systems needs to be “projected” to facilitate proper alignment during merging. The move and rotate AutoCAD commands will not do this. You must use AutoCAD Map commands to do this correctly.

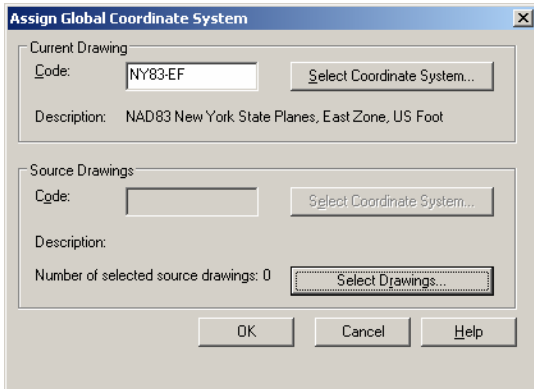
How to align with different coordinate systems:

Note: The following procedure was written using AutoCAD Land Desktop 2006 with AutoCAD Map.

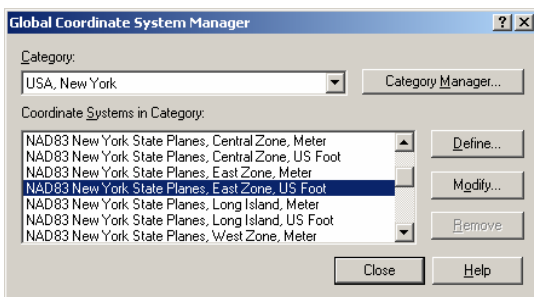
Click on **MAP – Tools – Assign Global Coordinate System**. (See your CAD manager or System Administrator if you don't have Map on your Menus...)



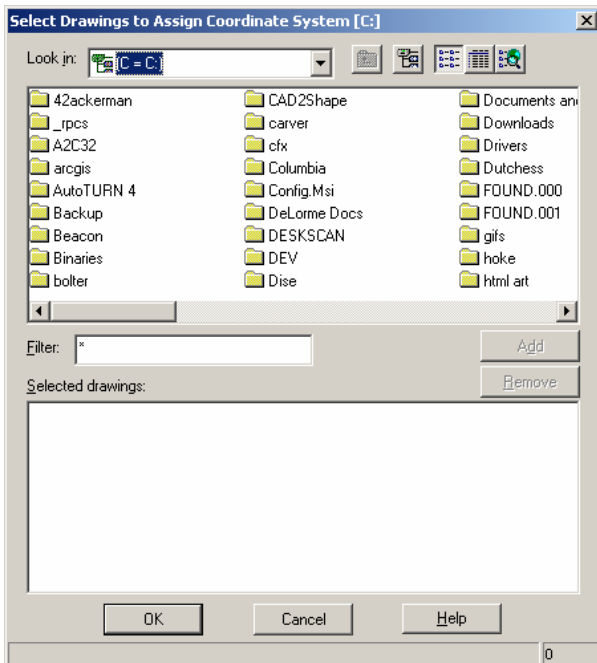
Select Coordinate System for the Current Drawing.



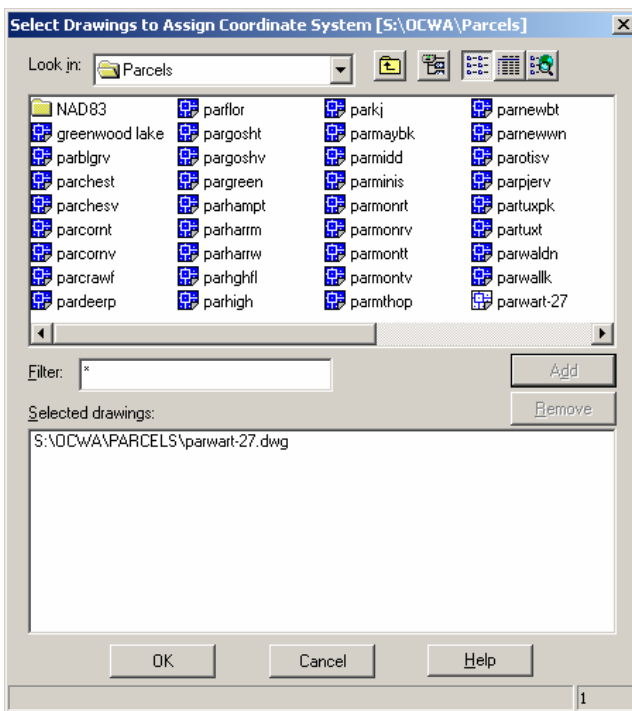
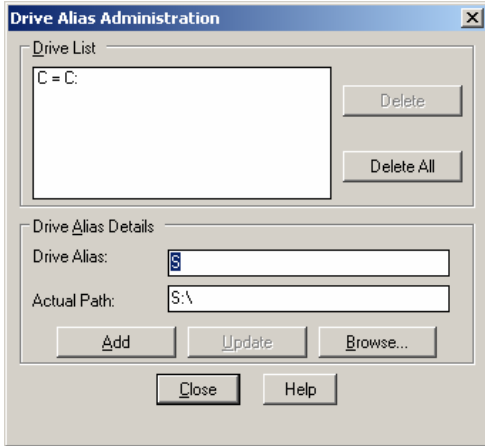
In this case, it's NAD83 NY East Foot.



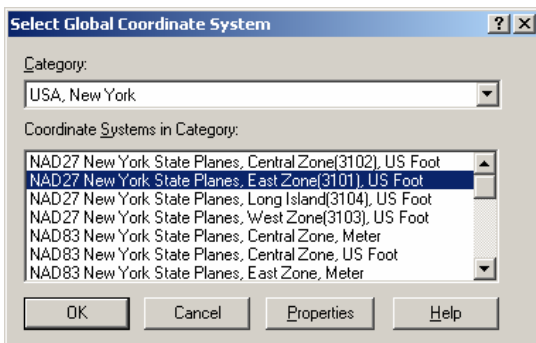
Next Select Drawings that you intend to bring into your current drawing. You will need to assign an "Alias" for each drive other than your "C" drive, which has been assigned by default.



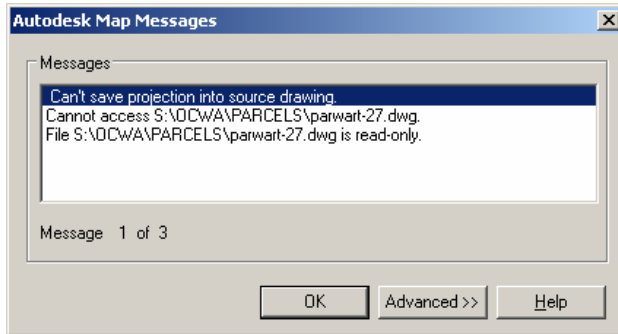
Once you add the new drive assignments, you can browse those directories for drawings.



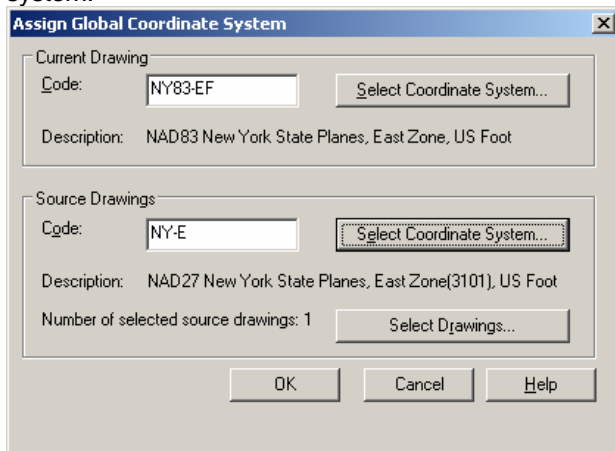
You can select one or more drawings to define their coordinate systems.



If you get an error message like this, it is because the drawing you have tried to imbed the coordinate system information into is a read-only file. (See your CAD manager or System Administrator before changing file attributes on network drives)



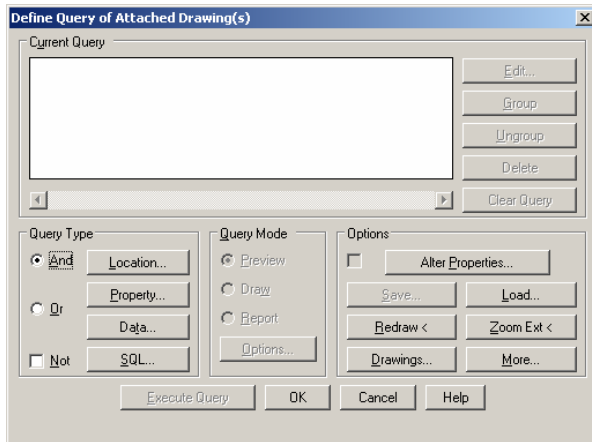
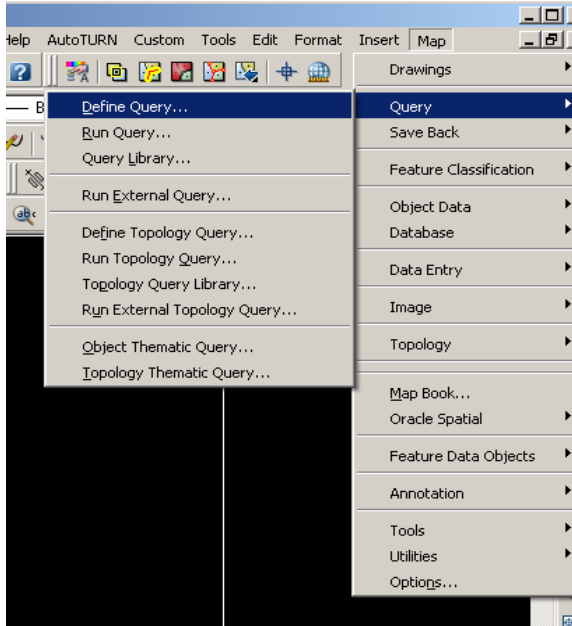
For this example, our current drawing is NAD83 and we want to bring in a parcel map in the NAD27 system.



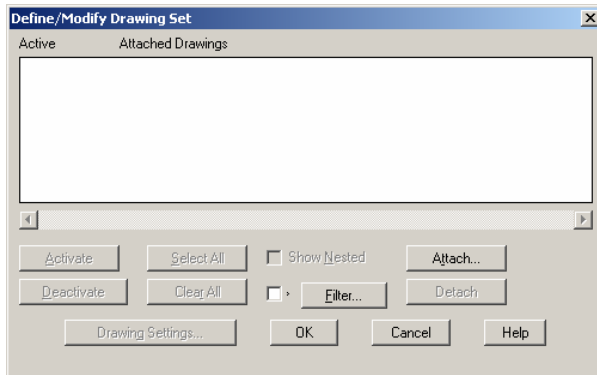
We have now simply defined what coordinate system each drawing is in. Once this has been completed, there should be no need to perform this operation again.

The next part of this procedure involves using the query command in AutoCAD Map to project the drawing into your current drawing.

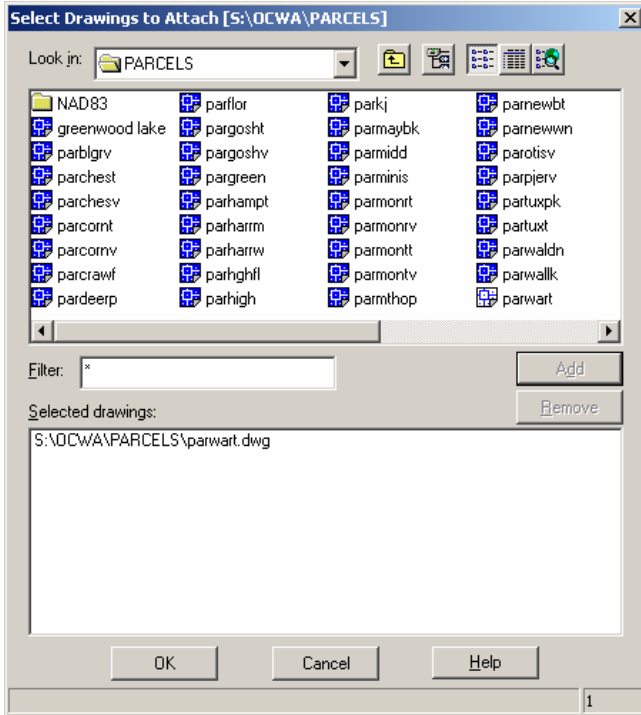
Click **MAP – Query – Define Query**



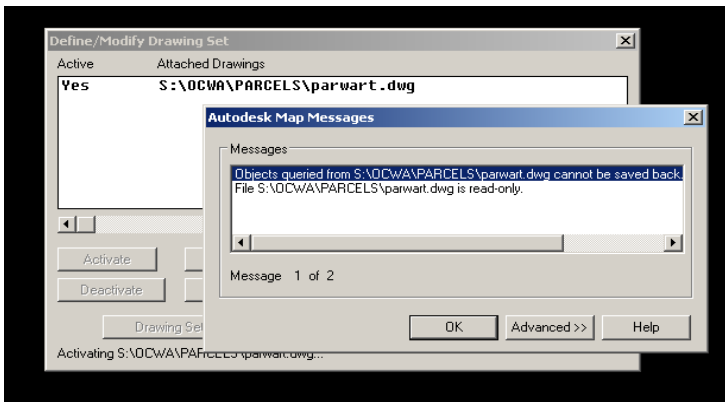
Click on "Drawings" to select drawings to bring into your current drawing. Click on "Attach" next.



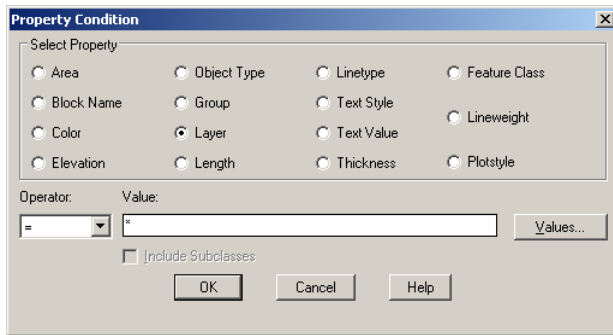
Select the drawing or drawings you want to bring in.



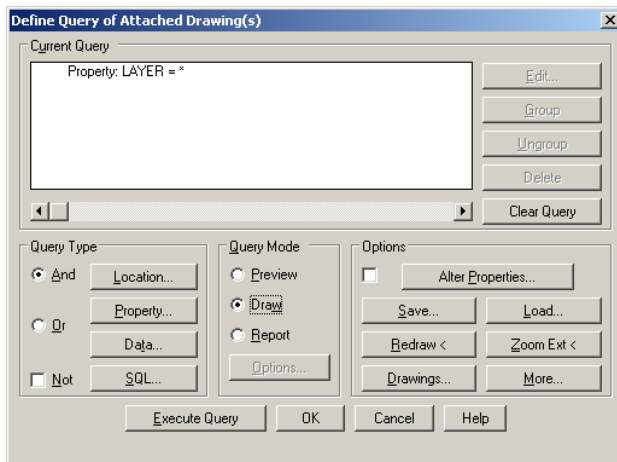
If you get an error message like this, it is because the drawing you have selected is a read-only file. This is intentional for the data files on our network drives. Ignore this message and click "OK". (See your CAD manager or System Administrator before changing file attributes on network drives)



Click on the “Property” Button under “Query Type” section in the Query Definition Dialog Box. Next click on the “Layer” Radio Button and insure that the Value is set to “*”.



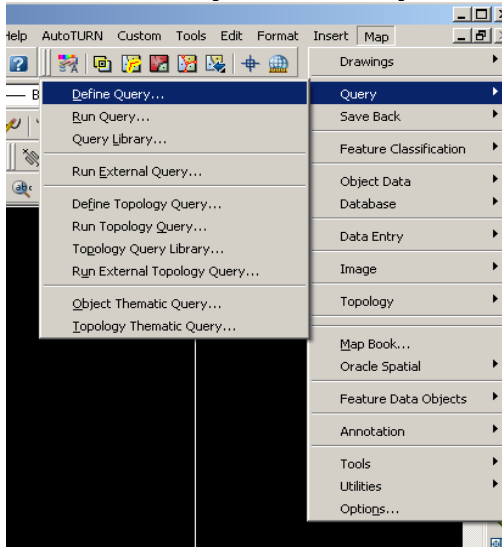
Click on the “Draw” radio Button under “Query Mode.”



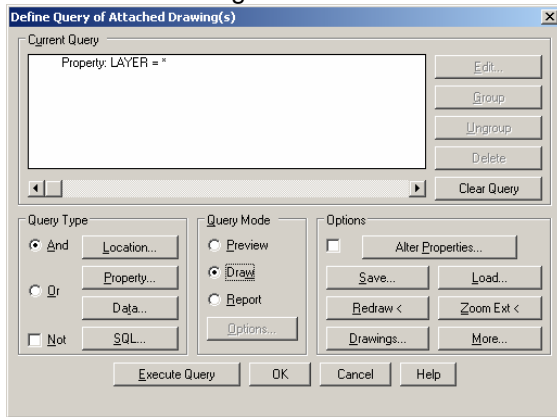
Click on “Execute Query” to actually bring the new drawing into your current drawing.

It is important to note that AutoCAD Map likes to save changes that are made to objects that were brought in using a query. You must “Detach” the drawings to avoid overwriting the original file and stop the nag screen that asks you to save back each time you want to exit the drawing.

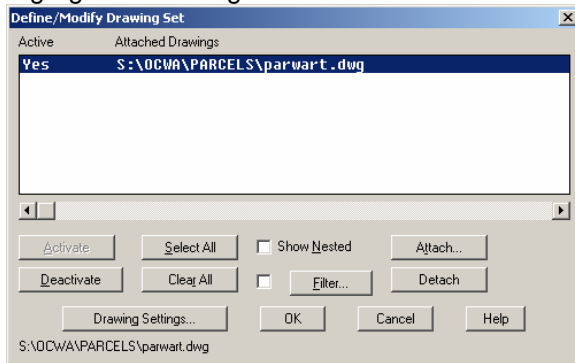
Click MAP – Query – Define Query



Click on the “Drawings” button



Highlight the drawing then click “Detach”. Click “OK” to exit the dialog box.



Please contact me if you have any questions concerning this procedure or need further clarification.

Thank You,

Tom Hanley