

Structural Desktop Newsletter

April, 2007

“Speeding up SDT through View Selection”

As SDT users become more comfortable with Structural Desktop, they will begin creating larger and ever-more complete models of their structures. In these large models, the speed of execution for Structural Desktop and AutoCAD commands is an issue worth consideration. Structural Desktop provides users with a way of dealing with large, intricate models through View Selection. Under “Structural Desktop – Viewing” – there are five options:

- View by Selection
- View by Range
- View by Plane
- Hide by Selection
- View All

Because of the way Structural Desktop and AutoCAD work together these commands give Structural Desktop users a unique capability.

The Viewing commands permit the user to selectively view (or remove from view) any members or elements. These members remain stored in the Structural Desktop database, but are not "in" AutoCAD while they are not visible. The “Viewing” commands invoke a Structural Desktop Regeneration when they are used. This complete flush of the AutoCAD database contributes to the speed with which you can then manipulate the objects. The only objects that are accessible and manipulated by AutoCAD in the drawing model are those that are currently active, while objects that are “Frozen” in AutoCAD (by the use of layers) are still updated when you make a change in AutoCAD. By limiting the number of members and elements to just a few by use of “Viewing” commands, you can speed up your session significantly.

“View by Selection” allows the user to select that portion of the model that he wishes to see using any of the standard AutoCAD selection functions, adding or removing members from the selection set. “View by Range” allows the user to view a sequential range of members and/or elements based on their assigned member or element numbers. “View by Plane” gives the user the ability to view a group of members which have a certain plane in common. “Hide by Selection” allows the user to select those members that he would wish to hide. Using “View by Selection” and “Hide by Selection” together permits the user to pare down the members currently under consideration to an easily understandable minimum. Finally, “View All” brings back the full model and completely restores AutoCAD’s database.

Unlike turning on and off layers or freezing layers, the structural desktop viewing commands clear the AutoCAD database freeing up space and speed for quick command execution. When used with layers, you have another level of flexibility in focusing on those members you need to work on and to temporarily exclude members or elements that clutter up and confuse your model.