

Starting Mentor Graphics' *DxDesigner* Tool Suite for the First Time

(ENGN1630 - Fall 2012)

Apologia: This software was updated this year for the first time in five years. The file formats and the operation of the software have changed and I am afraid that the instructions for use and the support files may not be functioning fully yet. Please let me know if you run into problems so I can try to fix them. People who used the software last year and who wish to open those files now will have to convert them to the new file formats. Check with me on how to do that.

Accounts: Everyone in this class should have an account on the Engineering instructional server allowing access to the CAD tools for the course. All those who preregistered for engineering courses get these accounts automatically and the list is updated two weeks into the semester from the Registrar's course enrollment data. The account name is the first 6 letters of your last name followed by the first letter of your first and middle names as shown on the Registrar's class list. The default password at the beginning of the year is automatically generated from your Banner ID. It will be the first letter of your last name in uppercase, followed by your complete Banner ID with a lowercase "b". For example, Eric William Dubois (B12345678) will have account "duboisew" and password Db12345678.

When you login for the first time you will be prompted to create your own password. The password that you choose must be at least eight characters long, cannot contain your username, and must contain at least three of the following four types of characters: A-Z uppercase, a-z lowercase, 0-9 base-10 digits, and non-alphanumeric characters (*e.g.*, !, @, #, \$). If you do not have an account, please see Stephanie Gesualdi, an administrative assistant on the 7th floor North side of Barus & Holley. Make sure you have your Brown ID with you when you see her.

Setup: The first time you wish to use Mentor Graphics' *DxDesigner* software suite or the *PADS PowerPCB* printed circuit layout tool, you must run an appropriate batch file. This sets up a directory system to hold your work and puts a first example of a project file and schematic into your account. It also sets up environmental variables and registry entries for system support. Among other things, it gives you access to some schematic symbol libraries and printed circuit land patterns.

To set up the directory system, use the mouse to select the start-menu sequence: "Start/All Programs/Electrical/Mentor Graphics SDD/Copy_INI." This may take a minute or more to complete but when it does, you will find a directory called "Wv" off your root directory on the U:\ drive. I have set up a default project space called "Engineering Classes". In it there is a default schematic, "Example.1" that has only a first page with a border but no circuit. It has all the symbol libraries ready to use and may be the basis for the schematic required in ENGN1630.

Startup: To start the *DxDesigner* schematic entry tool, invoke Start/Electrical/Mentor Graphics SDD/ Design Entry/DxDesigner. To open the example project that is installed by the startup file, use the menu sequence in DxDesigner: Files/Open/Project and if necessary browse to U:\wv\Engineering Classes. (Most likely that directory will be the default when the tool opens.) Select the project file, “EngineeringClasses.prj”. When that opens, go to the leftmost “Navigator” pane. Expand the “Board” item in the tree and double click “Example1”. The schematic that opens will only have a blank sheet with a block frame for documentation. Symbols come from symbol libraries you access through the “DxDatabook” pane in the lower left corner. See the ENGN1630 manual for more details.