Function Keys — How to Control and Benefit from them

MicroStation provides a number of tools that can aid any designer to increase the speed and accuracy of design work. One of these is function keys. They offer a quick way to accomplish many tasks and are very easy to configure and change.

The basic concept of function keys in MicroStation is to associate a key-in command or a series of key-in commands to a function key on the keyboard or a combination of a function key and the "Shift", "Alt" and "Ctrl" keys. This gives you 96 unique combinations. Since almost anything can be done with key-in commands in MicroStation, the possibilities for their use are only limited by your imagination.

After a default installation of MicroStation, a standard function key menu is loaded when MicroStation is started. To find out which function keys are mapped and the commands they are mapped to, click on the "Workspace" pulldown menu on the main MicroStation menu bar and select "Function keys...". This opens the "Function Keys" dialog box as shown below.

Function Keys:\interfaces\fkeys\funckey.mnu			
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Shorta		<u>K</u> ey F1	v 1
Key(s Currer	F1	<u>re</u> y <u>r</u>	
Key	String		
F1	help		
F3	backup		
F5	choose element		
F6	dmsg cursor nextwindow		-
	dit De <u>l</u> ete	<u>o</u> ĸ	Cancel

Notice that the name of the file which defines the values in this dialog box is displayed in the title bar at the top. Funckey.mnu is the default menu file name. The file is located in the: C:\Program Files\Workspace-CDOT\Standards-Local\Users\"individual user's name" in the CDOT Configuration.

Any function key combination that is currently being used is listed in the display area at the bottom of the dialog box. To see all the values you can simply scroll down the list. If you notice a missing function key or combination it just means that it has not been defined yet. In the image above you can see that function key "F1" is assigned to the key-in command "help". That's why when you hit the F1 key the MicroStation help file opens up. The "F2" key in the image above is assigned to a series of two key-in commands. If you look closely you can see they are separated by a semicolon (;). The semicolon is the character you use to separate multiple key-in commands entered on a single line. The MicroStation key-in "dialog reference" opens the reference file dialog box. The second key-in "reference display design" makes sure the reference file dialog displays the vector reference file attachments. As a note I have the "Shift-F2" combination mapped to "dialog reference; REFERENCE DISPLAY RASTER". This allows me to quickly change between raster and vector reference display, which is something I frequently do.

The area at the top of the dialog box labeled "Shortcut Keys" is used to designate the function key you want to view, change or define. The check boxes next to "Ctrl", "Alt" and "Shift" can be clicked on or off independently in any combination. The "Key" drop-down button to the right of these check boxes and labels has the choices "F1" through "F12" representing each of the function keys on your keyboard. By clicking on the appropriate check boxes and selecting a function key in the "Shortcut Key" section, you can view that

combinations current value, click the delete button at the bottom of the dialog to remove it's current assignment or use the "Edit" button to change its existing value or create a new value if it is currently undefined.

As a simple example of how function keys can save a lot of time in doing repetitive tasks, let's set up the function key combination "Shift-F11" so that when pressed, it will close all view windows, then open view one maximized and fit the view. This could be used as part of setting up deliverables to meet a client's standard. To start you would want to work out the key-in commands required to accomplish the above and test them manually to make sure they worked. The string that we will use to do the above is.

"view off all; view on 1; window tile; fit all; selview 1"

Now open the "Function Key" dialog as described above and click on the "Shift" checkbox and select "F11" from the drop-down button. If this combination is being used it will highlight in the display box in the bottom section of the dialog box. If it is not defined you will see (undefined) next to the label "Current". In either case click the "Edit" button. This opens the "Edit Key Definition" dialog box. Now type the key-in string from above into the "New" field. Keep in mind that there is a 56 character limit in entering key-in commands in this dialog. In another tip I will show you how to overcome this limitation, but for now, when the string is entered click the "OK" button to close the dialog. When you are done making changes to the function key list click the "OK" button on the main "Function Key" dialog box.

Clicking the "OK" button will bring up an "Alert" dialog box asking the question, "Save changes?", with three choices: "Yes", "No" and "Cancel". "Yes" saves the changes to the file listed at the top of the "Function Keys" dialog box. "No" closes the dialog box with your changes active for the current session but does not save the changes you made to the file. "Cancel" returns you to the "Function Keys" dialog box.

As a final note the main "Function Keys" dialog box has a "File" pulldown menu that allows you to "Open", "Save As" or "Save" function key menu files. If you create a new menu file and open it remember that it will only remain active in the current session unless you update the value of the MS_FKEYMNU environment variable to point to this new file and in the CDOT Configuration this is not an option.