

Section 4

Keyboard Macros

References & Resources	Chapters
1. Official DataCAD User's Guide	23
2. Advanced Construction Drawing & Visualization CD-ROM	4

OBJECTIVES

- Introduce the concepts for creating custom **Alt+key** keyboard macros.
- Teach how to increase productivity by creating 2-key shortcuts to commands and options which otherwise might take several or even dozens of steps.
- Chapter 23 of *The Official DataCAD User's Guide*, pages 1123 to 1131, walks you through the process of creating custom keyboard shortcuts.
- In Chapter 23, beginning at the bottom of page 1125 and ending at the top of page 1127, two specific examples are described in detail.
- Learn to create custom keyboard shortcuts to access DataCAD commands, features, and macros, creating efficiency and speed.
- Learning to create keyboard shortcuts is the first step to learning to create the slightly more complicated icon toolbar shortcuts and "aliases," since the process for both is identical in many places.
- An up to date list of **Alt+key** codes has been included on the Advanced Construction Drawing & Visualization CD-ROM.

LENGTH OF UNIT INSTRUCTION

2 class period plus homework.

PREREQUISITES

The only prerequisites for this Section are the basic ones outlined in Section 1. An introductory description of Keyboard Shortcuts begins on page 301 of *The Official DataCAD User's Guide*

NOTES

This topic, although somewhat complex, usually turns out to be a favorite with DataCAD users once they learn the basics. The keyboard shortcuts that are standard with DataCAD, unfortunately, are not necessarily the most useful ones. The best thing about custom shortcuts is that they allow users to adapt the program to best fit what they do and how they do it.

A new and related feature in DataCAD 10 is “aliases,” described on page 12-21 of this manual.

Because the DCADWIN.MCR file is just a simple text file, you can copy your work to a disk if they want to use the file at home.

DATA CAD USER’S GUIDE CORRELATION

Chapter 23, pages 1123 to 1131, walks you through the process of creating custom keyboard shortcuts, with two specific examples described in detail beginning at the bottom of page 1125 and ending at the top of page 1127.

As a second example, go over each line of the custom DCADWIN.MCR shown on page 1124. Line “H” is especially interesting due to its length and complexity, but may be hard to understand unless you know about “masking” and “selection sets” in DataCAD. It is important to do all the editing in a plain text editor like Windows Notepad. Word processors like Microsoft Word or Word Perfect can add non-ASCII characters to the file, and/or save the file in a format other than plain text.

REAL WORLD CORRELATION

As noted in the “NOTES,” above, this feature of DataCAD usually turns out to be a favorite with users once they learn the basics. The best thing about custom shortcuts is that they allow users to adapt the program to best fit what they do and how they do it. I have never found 2 DataCAD offices that have the same keyboard shortcuts, as each one adapts this feature to their particular needs. For instance, in my own practice some of the keyboard shortcuts that I use every single day, and feel I could just not get by without, include:

shortcut	function	notes
Alt+B	scale	Goes to Plotter/Scale menu; select scale for use with Text Scale, etc.
Alt+C	clip cube menu	Goes to Clip Cube menu
Alt+D	mltyout details	Goes to the Mltlyout menu and displays the current MSP sheet
Alt+G	3D GotoView Menu	Go to 3D GotoView Menu
Alt+H	selection sets – by color	Clears previous selection set 8, makes it active and prompts you to mask by color
Alt+I	<i>identify, set-all</i>	<i>Place cursor on line to identify, then invoke the macro. matches line type, spacing color & layer</i>
Alt+L	line type menu	Puts you in the dead linetype menu
Alt+M	layout in Multi-Scale-Plot	Puts you in Multi-Scale-Plotting to lay out the current detail
Alt+Q	update goto view 1	Saves current view as temporary (“temp”) Goto View #1. (assumes “temp” is always first GTV)
Alt+T	text menu	Takes you to the Text menu
Alt+V	match current line settings	Select entities. They will be changed to match all current line settings. (often used after ALT-I)
Alt+X	<i>edit text by entity</i>	<i>Place cursor on text entity to edit text contents</i>
Alt+Y	create and name new layer	Creates new layer and prompts you to name it
Alt+Z	save 3D GotoView	Goes to 3D GotoView and prompts you to enter a name

Take the **Alt+Q** macro, for instance. You might not find this option in too many offices, since it requires that ALL drawings done in the office have the first GotoView set up as a “Temp” view that gets changed all the time with the macro. But that’s what works for us. And we depend on Multi-Scale Plotting so much that we have dedicated both **Alt+D** and **Alt+M** to it. And because clip cubes and GotoViews are so tightly related to the efficient use of Multi-Scale Plotting, we also have related shortcuts with **Alt+C**, **Alt+G** and **Alt+Z**.

HOMEWORK

As a homework project, create three keyboard shortcuts to do the following:

1. Assign the letter “P” to: **Edit/Geometry/Offset/PerpDist**.
2. Assign the letter “S” to the Toolbox macro: **Toolbox/LyrUtil/LyrSave/SaveAll**.
3. Create your own third shortcut to do something useful.

Write out or type the full shortcuts on paper, along with a description of how the macro works.

SECTION 4 – REVIEW QUESTIONS

1. What is the name of the keyboard shortcut file and what DataCAD file folder is it located in?
 - a. DCADWIN.KEY in the /SUP/MenuPOF folder.
 - b. DCADWIN.MCR in the /DCX folder.
 - c. DCADWIN.KEY in the /SUP folder.
 - d. DCADWIN.MCR in the /SUP folder.
2. *Circle one:* Every shortcut must have a ; or : at the beginning of each line.
 - a. TRUE
 - b. FALSE
3. Using the letter “M” in a keyboard macro allows you to access:
 - a. DataCAD’s Immediate Mode Commands.
 - b. A Toolbox macro.
 - c. Symbols.
 - d. None of the above.
4. Which character is used to separate all commands in a keyboard macro line?
 - a. >
 - b. <
 - c. \$
 - d. ^
 - e. :
 - f. ;

5. In the example macro for the letter F shown at the top of page 1126 of *The Official DataCAD User's Guide*, the "F8" turns on or off Object Snapping by Perpendicular. What would you have to change it to in order for the macro to turn it ON or OFF by End Point, instead?
- a. S1.
 - b. S0.
 - c. F1.
 - d. F2.
6. What will this macro do: K^;^S8^S9^S7^
- a. Pressing **Alt+K** will take you to the **WindowIn** option.
 - b. Pressing **Alt+K** will take you to the **3DViews** menu.
 - c. Pressing **Alt+K** will take you to the **3DEntity**.
 - d. Pressing **Alt+K** will take you to the **ClipCube** menu.