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# Visual Studio shortcut keys

Here is a handy reference that can make your .NET lifestyle a bit easier and more productive.

The 'must-know' shortcut keys are **Highlighted**.

- ➔ Better Code
- ➔ Better Career
- ➔ Better Lifestyle

## Select a category

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**.NET**  
**Design Pattern**  
**Framework 4.5**  
**(/products/net-design-pattern-framework)**



- ▶ Tool window
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## General

Shortcut	Description
<b>Ctrl-X</b> or Shift-Delete	Cuts the currently selected item to the clipboard
<b>Ctrl-C</b> or Ctrl-Insert	Copies the currently selected item to the clipboard
<b>Ctrl-V</b> or Shift-Insert	Pastes the item in the clipboard at the cursor
<b>Ctrl-Z</b> or Alt-Backspace	Undo previous editing action
<b>Ctrl-Y</b> or Ctrl-Shift-Z	Redo the previous undo action
<b>Ctrl-Shift-V</b> or Ctrl-Shift-Insert	Pastes an item from the clipboard ring tab of the Toolbox at the cursor in the file and automatically selects the pasted item. Cycle through the items on the clipboard by pressing the shortcut keys repeatedly



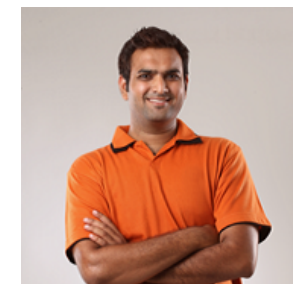
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<b>Esc</b>	Closes a menu or dialog, cancels an operation in progress, or places focus in the current document window
<b>Ctrl-S</b>	Saves the selected files in the current project (usually the file that is being edited)
<b>Ctrl-Shift-S</b>	Saves all documents and projects
<b>Ctrl-P</b>	Displays the Print dialog
<b>F7</b>	Switches from the design view to the code view in the editor
<b>Shift-F7</b>	Switches from the code view to the design view in the editor
<b>F8</b>	Moves the cursor to the next item, for example in the TaskList window or Find Results window
<b>Shift-F8</b>	Moves the cursor to the previous item, for example in the TaskList window or Find Results window
<b>Shift-F12</b>	Finds a reference to the selected item or the item under the cursor
<b>Ctrl-Shift-G</b>	Opens the file whose name is under the cursor or is currently selected
<b>Ctrl-/</b>	Switches focus to the Find/Command box on the Standard toolbar
<b>Ctrl-Shift-F12</b>	Moves to the next task in the TaskList window
<b>Ctrl-Shift-8</b>	Moves backward in the browse history. Available in the object browser or Class View window
<b>Alt-Left Arrow</b>	Go back in the web browser history
<b>Alt-Right Arrow</b>	Go forward in the web browser history

**Includes:**

- Gang of Four Patterns
- Head First Patterns
- Enterprise Patterns
- Multi-Tier Patterns
- Repository Pattern
- Unit-of-Work Pattern
- Active Record Pattern
- CQRS Pattern
- Model View Controller
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- Model View ViewModel
- Spark™ RAD Platform
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## Text navigation

Shortcut	Description
Left Arrow	Moves the cursor one character to the left
Right Arrow	Moves the cursor one character to the right
Down Arrow	Moves the cursor down one line
Up Arrow	Moves the cursor up one line
Page Down	Scrolls down one screen in the editor window
Page Up	Scrolls up one screen in the editor window
End	Moves the cursor to the end of the current line
Home	Moves the cursor to the beginning of the line. If you press Home when the cursor is already at the start of the line, it will toggle the cursor between the first non-whitespace character and the real start of the line
Ctrl-End	Moves the cursor to the end of the document
Ctrl-Home	Moves the cursor to the start of the document
Ctrl-G	Displays the Go to Line dialog. If the debugger is running, the dialog also lets you specify addresses or function names to go to



<b>Ctrl-J</b>	Moves the cursor to the matching brace in the document. If the cursor is on an opening brace, this will move to the corresponding closing brace and vice versa
Ctrl-K, Ctrl-N	Moves to the next bookmark in the document
Ctrl-K, Ctrl-P	Moves to the previous bookmark
Ctrl-K, Ctrl-I	Displays Quick Info, based on the current language
Ctrl-Down Arrow	Scrolls text down one line but does not move the cursor. This is useful for scrolling more text into view without losing your place. Available only in text editors
Ctrl-Up Arrow	Scrolls text up one line but does not move the cursor. Available only in text editors
<b>Ctrl-Right Arrow</b>	Moves the cursor one word to the right
<b>Ctrl-Left Arrow</b>	Moves the cursor one word to the left
Ctrl-Shift-1	Navigates to the next definition, declaration, or reference of an item. Available in the object browser and Class View window. Also available in source editing windows if you have already used the Edit.GoToReference (Shift-F12) shortcut
Ctrl-Shift-2	Navigates to the previous definition, declaration, or reference of an item



## Text manipulation

Shortcut	Description
<b>Enter</b>	Inserts a new line
<b>Delete</b>	Deletes one character to the right of the cursor
<b>Insert</b>	Toggles between insert and overwrite insertion modes
<b>Tab</b>	Indents the currently selected line or lines by one tab stop. If there is no selection, this inserts a tab stop
<b>Shift-Tab</b>	Moves current line or selected lines one tab stop to the left
<b>Backspace</b> or <b>Shift-Backspace</b>	Deletes one character to the left of the cursor
<b>Ctrl-K, Ctrl-C</b>	Marks the current line or selected lines of code as a comment, using the correct comment syntax for the programming language
<b>Ctrl-K, Ctrl-U</b>	Removes the comment syntax from the current line or currently selected lines of code
<b>Ctrl-T</b> or <b>Shift-Enter</b>	Swaps the characters on either side of the cursor. (For example, AC BD becomes AB CD.) Available only in text editors
<b>Ctrl-K, Ctrl-L</b>	Removes all unnamed bookmarks in the current document
<b>Ctrl-M, Ctrl-O</b>	Automatically determines logical boundaries for creating regions in code, such as procedures, and then hides them. This collapses all such regions in the current document



Alt-Right Arrow or Ctrl-Spacebar	Displays statement completion based on the current language or autocompletes word if existing text unambiguously identifies a single symbol
Ctrl-K, Ctrl-\	Removes horizontal whitespace in the selection or deletes whitespace adjacent to the cursor if there is no selection
Ctrl-K, Ctrl-F	Applies the indenting and space formatting for the language as specified on the Formatting pane of the language in the Text Editor section of the Options dialog to the selected text.
Ctrl-L	Cuts all selected lines or the current line if nothing has been selected to the clipboard
Ctrl-Shift-L	Deletes all selected lines or the current line if no selection has been made
Ctrl-Enter	Inserts a blank line above the cursor
Ctrl-Shift-Enter	Inserts a blank line below the cursor
Shift-Alt-T	Moves the line containing the cursor below the next line
<b>Ctrl-J</b>	Lists members for statement completion when editing code
<b>Ctrl-U</b>	Changes the selected text to lowercase characters
<b>Ctrl-Shift-U</b>	Changes the selected text to uppercase characters
Ctrl-Shift-Spacebar	Displays a tooltip that contains information for the current parameter, based on the current language
Ctrl-M, Ctrl-U	Removes the outlining information for the currently selected region
Ctrl-M, Ctrl-P	Removes all outlining information from the entire document



Ctrl-R, Ctrl-P	Swaps the anchor and endpoint of the current selection
Ctrl-M, Ctrl-L	Toggles all previously marked hidden text sections between hidden and display states
Ctrl-K, Ctrl-K	Sets or removes a bookmark at the current line
Ctrl-M, Ctrl-M	Toggles the currently selected hidden text section or the section containing the cursor if there is no selection between the hidden and display states
Ctrl-K, Ctrl-H	Sets or removes a shortcut in the tasklist to the current line
Ctrl-R, Ctrl-R	Enables or disables word wrap in an editor
<b>Ctrl-R, Ctrl-W</b>	Shows or hides spaces and tab marks
Ctrl-Delete	Deletes the word to the right of the cursor
Ctrl-Backspace	Deletes the word to the left of the cursor
Ctrl-Shift-T	Transposes the two words that follow the cursor. (For example,  End Sub would be changed to read Sub End .)
<b>Ctrl-.[dot]</b>	Display options on smarttag menu. Very useful for showing using/Imports options.



## Text selection





Shortcut	Description
<b>Shift-Left Arrow</b>	Moves the cursor to the left one character, extending the selection
Shift-Alt-Left Arrow	Moves the cursor to the left one character, extending the column selection
<b>Shift-Right Arrow</b>	Moves the cursor to the right one character, extending the selection
Shift-Alt-Right Arrow	Moves the cursor to the right one character, extending the column selection
<b>Ctrl-Shift-End</b>	Moves the cursor to the end of the document, extending the selection
<b>Ctrl-Shift-Home</b>	Moves the cursor to the start of the document, extending the selection
<b>Ctrl-Shift-]</b>	Moves the cursor to the next brace, extending the selection
<b>Shift-Down Arrow</b>	Moves the cursor down one line, extending the selection
Shift-Alt-Down Arrow	Moves the cursor down one line, extending the column selection
<b>Shift-End</b>	Moves the cursor to the end of the current line, extending the selection
Shift-Alt-End	Moves the cursor to the end of the line, extending the column selection
<b>Shift-Home</b>	Moves the cursor to the start of the line, extending the selection
Shift-Alt-Home	Moves the cursor to the start of the line, extending the column selection



<b>Shift-Up Arrow</b>	Moves the cursor up one line, extending the selection
Shift-Alt-Up Arrow	Moves the cursor up one line, extending the column selection
<b>Shift-Page Down</b>	Extends selection down one page
<b>Shift-Page Up</b>	Extends selection up one page
<b>Ctrl-A</b>	Selects everything in the current document
Ctrl-W	Selects the word containing the cursor or the word to the right of the cursor
Ctrl-=	Selects from the current location in the editor back to the previous location in the navigation history
<b>Ctrl-Shift-Page Down</b>	Moves the cursor to the last line in view, extending the selection
<b>Ctrl-Shift-Page Up</b>	Moves the cursor to the top of the current window, extending the selection
<b>Ctrl-Shift-Alt-Right Arrow</b>	Moves the cursor to the right one word, extending the column selection
<b>Ctrl-Shift-Left Arrow</b>	Moves the cursor one word to the left, extending the selection
Ctrl-Shift-Alt-Left Arrow	Moves the cursor to the left one word, extending the column selection



## Project related

Shortcut	Description
Ctrl-Shift-B	Builds the solution
Ctrl-N	Displays the New File dialog. Note: files created this way are not associated with a project. Use Ctrl-Shift-A to add a new file in a project
Ctrl-Shift-N	Displays the New Project dialog
Ctrl-O	Displays the Open File dialog
Ctrl-Shift-O	Displays the Open Project dialog
Shift-Alt-A	Displays the Add Existing Item dialog
Ctrl-Shift-A	Displays the Add New Item dialog
Ctrl-Alt-Insert	Allows you to override base class methods in a derived class when an overridable method is highlighted in the Class View pane

## Window manipulation

Shortcut	Description
Shift-Alt-Enter	Toggles full screen mode



Ctrl-+	Goes back to the previous location in the navigation history. (For example, if you press Ctrl-Home to go to the start of a document, this shortcut will take the cursor back to wherever it was before you pressed Ctrl-Home.)
Ctrl-Shift-+	Moves forward in the navigation history. This is effectively an undo for the View.NavigateBackward operation
Ctrl-F4	Closes the current MDI child window
Shift-Esc	Closes the current tool window
Ctrl-F2	Moves the cursor to the navigation bar at the top of a code view
<b>Ctrl-Tab</b>	Cycles through the MDI child windows one window at a time
Ctrl-F6, Ctrl-Shift-Tab	Moves to the previous MDI child window
Alt-F6, Ctrl-Shift-F6	Moves to the next tool window
Shift-Alt-F6	Moves to the previously selected window
F6	Moves to the next pane of a split pane view of a single document
Shift-F6	Moves to the previous pane of a document in split pane view
Ctrl-Pagedown	Moves to the next tab in the document or window (e.g., you can use this to switch the HTML editor from its design view to its HTML view)
Ctrl-PageUp	Moves to the previous tab in the document or window



## Control editor (designer)

Shortcut	Description
Ctrl-Down Arrow	Moves the selected control down in increments of one on the design surface
Down Arrow	Moves the selected control down to the next grid position on the design surface
Ctrl-Left Arrow	Moves the control to the left in increments of one on the design surface
Left Arrow	Moves the control to the left to the next grid position on the design surface
Ctrl-Right Arrow	Moves the control to the right in increments of one on the design surface
Right Arrow	Moves the control to the right into the next grid position on the design surface
Ctrl-Up Arrow	Moves the control up in increments of one on the design surface
Up Arrow	Moves the control up into the next grid position on the design surface
Tab	Moves to the next control in the tab order
Shift-Tab	Moves to the previous control in the tab order
Ctrl-Shift-Down Arrow	Increases the height of the control in increments of one on the design surface



<b>Shift-Down Arrow</b>	Increases the height of the control to the next grid position on the design surface
<b>Ctrl-Shift-Left Arrow</b>	Reduces the width of the control in increments of one on the design surface
<b>Shift-Left Arrow</b>	Reduces the width of the control to the next grid position on the design surface
<b>Ctrl-Shift-Right Arrow</b>	Increases the width of the control in increments of one on the design surface
<b>Shift-Left Arrow</b>	Increases the width of the control to the next grid position on the design surface
<b>Ctrl-Shift-Up Arrow</b>	Decreases the height of the control in increments of one on the design surface
<b>Shift-Up Arrow</b>	Decreases the height of the control to the next grid position on the design surface

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## Search and replace

Shortcut	Description
<b>Ctrl-F</b>	Displays the Find dialog
<b>Ctrl-Shift-F</b>	Displays the Find in Files dialog
<b>F3</b>	Finds the next occurrence of the previous search text



<b>Ctrl-F3</b>	Finds the next occurrence of the currently selected text or the word under the cursor if there is no selection
<b>Shift-F3</b>	Finds the previous occurrence of the search text
<b>Ctrl-Shift-F3</b>	Finds the previous occurrence of the currently selected text or the word under the cursor
<b>Ctrl-D</b>	Places the cursor in the Find/Command line on the Standard toolbar
<b>Alt-F3, H</b>	Selects or clears the Search Hidden Text option for the Find dialog
<b>Ctrl-I</b>	Starts an incremental search—after pressing Ctrl-I, you can type in text, and for each letter you type, VS.NET will find the first occurrence of the sequence of letters you have typed so far. This is a very convenient facility, as it lets you find text by typing in exactly as many characters as are required to locate the text and no more. If you press Ctrl-I a second time without typing any characters, it recalls the previous pattern. If you press it a third time or you press it when an incremental search has already found a match, VS.NET searches for the next occurrence.
<b>Alt-F3, C</b>	Selects or clears the Match Case option for Find and Replace operations
<b>Alt-F3, R</b>	Selects or clears the Regular Expression option so that special characters can be used in Find and Replace operations
<b>Ctrl-H</b>	Displays the Replace dialog
<b>Ctrl-Shift-H</b>	Displays the Replace in Files dialog
<b>Ctrl-Shift-I</b>	Performs an incremental search in reverse direction



Alt-F3, S	Halts the current Find in Files operation
Alt-F3, B	Selects or clears the Search Up option for Find and Replace operations
Alt-F3, W	Selects or clears the Match Whole Word option for Find and Replace operations
Alt-F3, P	Selects or clears the Wildcard option for Find and Replace operations

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## Help

Shortcut	Description
Ctrl-Alt-F1	Displays the Contents window for the documentation
Ctrl-F1	Displays the Dynamic Help window, which displays different topics depending on what items currently have focus. If the focus is in a source window, the Dynamic Help window will display help topics that are relevant to the text under the cursor
F1	Displays a topic from Help that corresponds to the part of the user interface that currently has the focus. If the focus is in a source window, Help will try to display a topic relevant to the text under the cursor
Ctrl-Alt-F2	Displays the Help Index window





Shift-Alt-F2	Displays the Index Results window, which lists the topics that contain the keyword selected in the Index window
Alt-Down Arrow	Displays the next topic in the table of contents. Available only in the Help browser window
Alt-Up Arrow	Displays the previous topic in the table of contents. Available only in the Help browser window
Ctrl-Alt-F3	Displays the Search window, which allows you to search for words or phrases in the documentation
Shift-Alt-F3	Displays the Search Results window, which displays a list of topics that contain the string searched for from the Search window.
Shift-F1	Displays a topic from Help that corresponds to the user interface item that has the focus

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## Debugging

Shortcut	Description
Ctrl-Alt-V, A	Displays the Auto window to view the values of variables currently in the scope of the current line of execution within the current procedure
Ctrl-Alt-Break	Temporarily stops execution of all processes in a debugging session. Available only in run mode
Ctrl-Alt-B	Displays the Breakpoints dialog, where you can add and modify breakpoints



Ctrl-Alt-C	Displays the Call Stack window to display a list of all active procedures or stack frames for the current thread of execution. Available only in break mode
Ctrl-Shift-F9	Clears all of the breakpoints in the project
Ctrl-Alt-D	Displays the Disassembly window
Ctrl-F9	Enables or disables the breakpoint on the current line of code. The line must already have a breakpoint for this to work
Ctrl-Alt-E	Displays the Exceptions dialog
Ctrl-Alt-I	Displays the Immediate window, where you can evaluate expressions and execute individual commands
Ctrl-Alt-V, L	Displays the Locals window to view the variables and their values for the currently selected procedure in the stack frame
Ctrl-Alt-M, 1	Displays the Memory 1 window to view memory in the process being debugged. This is particularly useful when you do not have debugging symbols available for the code you are looking at. It is also helpful for looking at large buffers, strings, and other data that does not display clearly in the Watch or Variables window
Ctrl-Alt-M, 2	Displays the Memory 2 window
Ctrl-Alt-M, 3	Displays the Memory 3 window
Ctrl-Alt-M, 4	Displays the Memory 4 window



Ctrl-Alt-U	Displays the Modules window, which allows you to view the .dll or .exe files loaded by the program. In multiprocess debugging, you can right-click and select Show Modules for all programs
Ctrl-B	Opens the New Breakpoint dialog
Ctrl-Alt-Q	Displays the Quick Watch dialog with the current value of the selected expression. Available only in break mode. Use this command to check the current value of a variable, property, or other expression for which you have not defined a watch expression
Ctrl-Alt-G	Displays the Registers window, which displays CPU register contents
Ctrl-Shift-F5	Terminates the current debugging session, rebuilds if necessary, and then starts a new debugging session. Available in break and run modes
Ctrl-Alt-N	Displays the Running Documents window that displays the set of HTML documents that you are in the process of debugging. Available in break and run modes
Ctrl-F10	Starts or resumes execution of your code and then halts execution when it reaches the selected statement. This starts the debugger if it is not already running
Ctrl-Shift-F10	Sets the execution point to the line of code you choose
Alt-NUM *	Highlights the next statement to be executed
F5	If not currently debugging, this runs the startup project or projects and attaches the debugger. If in break mode, this allows execution to continue (i.e., it returns to run mode).



<b>Ctrl-F5</b>	Runs the code without invoking the debugger. For console applications, this also arranges for the console window to stay open with a "Press any key to continue" prompt when the program finishes
<b>F11</b>	Executes code one statement at a time, tracing execution into function calls
<b>Shift-F11</b>	Executes the remaining lines of a function in which the current execution point lies
<b>F10</b>	Executes the next line of code but does not step into any function calls
<b>Shift-F5</b>	Available in break and run modes, this terminates the debugging session
<b>Ctrl-Alt-V, T</b>	Displays the This window, which allows you to view the data members of the object associated with the current method
<b>Ctrl-Alt-H</b>	Displays the Threads window to view all of the threads for the current process
<b>F9</b>	Sets or removes a breakpoint at the current line
<b>Ctrl-F11</b>	Displays the disassembly information for the current source file. Available only in break mode
<b>Ctrl-Alt-W, 1</b>	Displays the Watch 1 window to view the values of variables or watch expressions
<b>Ctrl-Alt-W, 2</b>	Displays the Watch 2 window
<b>Ctrl-Alt-W, 3</b>	Displays the Watch 3 window
<b>Ctrl-Alt-W, 4</b>	Displays the Watch 4 window



**Ctrl-Alt-P**

Displays the Processes dialog, which allows you to attach or detach the debugger to one or more running processes

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## Object browser

Shortcut	Description
<b>Alt-F12</b>	Displays the Find Symbol dialog
<b>Ctrl-F12</b>	Displays the declaration of the selected symbol in the code
<b>F12</b>	Displays the definition for the selected symbol in code
<b>Ctrl-Alt-F12</b>	Displays the Find Symbol Results window
<b>Ctrl-Alt-J</b>	Displays the Object Browser to view the classes, properties, methods, events, and constants defined either in your project or by components and type libraries referenced by your project
<b>Alt-+</b>	Moves back to the previously selected object in the selection history of the object browser
<b>Shift-Alt-+</b>	Moves forward to the next object in the selection history of the object browser



## Tool window

Shortcut	Description
Ctrl-Shift-M	Toggles the Command window into or out of a mode allowing text within the window to be selected
Ctrl-Shift-C	Displays the Class View window
Ctrl-Alt-A	Displays the Command window, which allows you to type commands that manipulate the IDE
Ctrl-Alt-T	Displays the Document Outline window to view the flat or hierarchical outline of the current document
Ctrl-Alt-F	Displays the Favorites window, which lists shortcuts to web pages
Ctrl-Alt-O	Displays the Output window to view status messages at runtime
F4	Displays the Properties window, which lists the design-time properties and events for the currently selected item
Shift-F4	Displays the property pages for the item currently selected. (For example, use this to show a project's settings.)
Ctrl-Shift-E	Displays the Resource View window
Ctrl-Alt-S	Displays the Server Explorer window, which allows you to view and manipulate database servers, event logs, message queues, web services, and many other operating system services



Ctrl-Alt-R	Displays the web browser window, which allows you to view pages on the Internet
Ctrl-Alt-L	Displays the Solution Explorer, which lists the projects and files in the current solution
Ctrl-Alt-K	Displays the TaskList window, which displays tasks, comments, shortcuts, warnings, and error messages
Ctrl-Alt-X	Displays the Toolbox, which contains controls and other items that can be dragged into editor and designer windows

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## Html editor (Design View)

Shortcut	Description
Ctrl-B	Toggles the selected text between bold and normal
Ctrl-Shift-T	Decreases the selected paragraph by one indent unit
Ctrl-T	Indents the selected paragraph by one indent unit
Ctrl-I	Toggles the selected text between italic and normal
Ctrl-Shift-K	Prevents an absolutely positioned element from being inadvertently moved. If the element is already locked, this unlocks it
Ctrl-G	Toggles the grid



Ctrl-Shift-G	Specifies that elements be aligned using an invisible grid. You can set grid spacing on the Design pane of HTML designer options in the Options dialog, and the grid will be changed the next time you open a document
Ctrl-U	Toggles the selected text between underlined and normal
Ctrl-Shift-L	Displays the Bookmark dialog
Ctrl-J	Inserts <div></div> in the current HTML document
Ctrl-L	When text is selected, displays the Hyperlink dialog
Ctrl-Shift-W	Displays the Insert Image dialog
Ctrl-Alt-Up Arrow	Adds one row above the current row in the table
Ctrl-Alt-Down Arrow	Adds one row below the current row in the table
Ctrl-Alt-Left Arrow	Adds one column to the left of the current column in the table
Ctrl-Alt-Right Arrow	Adds one column to the right of the current column in the table
Ctrl-Shift-Q	Toggles display of marker icons for HTML elements that do not have a visual representation, such as comments, scripts, and anchors for absolutely positioned elements
Ctrl-Page Down	Switches from design view to HTML view and vice versa
Ctrl-Q	Displays a 1-pixel border around HTML elements that support a BORDER attribute and have it set to zero, such as tables, table cells, and divisions





## Macro

Shortcut	Description
<b>Alt-F8</b>	Displays the Macro Explorer window, which lists all available macros
<b>Alt-F11</b>	Launches the macros IDE
<b>Ctrl-Shift-R</b>	Places the environment in macro record mode or completes recording if already in record mode
<b>Ctrl-Shift-P</b>	Plays back a recorded macro

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