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JAWS 6 and Internet Explorer 6.0

Introduction
Internet Explorer 6.0 is a suite of tightly integrated programs that connects a computer to the information that is available through the Internet and Intranets. Internet Explorer not only acts as a browser to display the data, but it also helps the user find, incorporate, and interact with that data. These applications run under Microsoft Windows 95, Windows 98, and Microsoft Windows NT/2000. When using Microsoft Windows NT, Service Pack 4 or later is required.

Getting Started
Make sure that IE is installed properly on and running correctly. It is recommended not to install the Active Desktop component with IE. If the IE toolbar is used, include text labels on the buttons. Default IE settings include text labels.

Open the Internet Explorer settings panel:
1. Open the IE Tools menu with Alt T.
2. Tap o to go to Internet Options.
3. Enter Alt E to move to the Accessibility button in this dialog box.
4. Make sure "Ignore Colors..." is selected.
5. Close this panel by selecting the OK button.
6. Use Control Tab to get to the Advanced settings tab.
7. Under the Accessibility section, make sure the following are checked:
   - Always expand ALT text for images
   - Move system caret with focus
8. Under the Browsing section, make sure the following options are NOT checked:
   - Show Channel bar at startup
   - Show friendly URLs
   - Use smooth scrolling
   - Enable page transitions

JAWS Keystrokes for Internet Explorer 6.0
JAWS for Windows now supports Microsoft Internet Explorer 6.0. All of the keystrokes you have become accustomed to in Internet Explorer 5.5 remain unchanged. Use the following commands for navigating in form fields:

<table>
<thead>
<tr>
<th>Ctrl Insert Tab</th>
<th>Move To Next Form Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrl Insert Shift Tab</td>
<td>Move To Prior Form Field</td>
</tr>
<tr>
<td>Ctrl Insert End</td>
<td>Move To Last Form Field</td>
</tr>
</tbody>
</table>
Note: These keystrokes only work in Virtual PC Cursor mode. Once you have located the desired form field, you need to press **Enter** to switch to Forms Mode.

**Screen follows the Virtual PC Cursor**
The screen tracks the location of the Virtual PC cursor.

**Persistence of Settings in List of Links**
If the user filters or organizes their list in the Link List dialog, this setting will remain until they change it or exit JFW. The default setting that ships with JFW is All Links in Tab Order.

**Improvements to Links List**
The status line contains the URL for selected link. This enables the user to determine which of several links with the same text name they want to activate or move to, i.e., which “Click Here” is the right one to select

**Graphic Announcement Toggle**
The user has the ability to turn off the announcement of graphics that are not links. The user is able to toggle this through the HTML Settings Dialog in the Configuration Manager. The choices are: No Graphics, Tagged Graphics, and All Graphics. The default setting is All Graphics.

**ALT Text and Screen Text Toggle**
Often, the ALT Text of links on a Web page is different from the text shown on the screen. Depending on the Web page, either can be more descriptive. The user has the choice to select which of these they would like JFW to seek as the primary text to speak.

If the user selects Screen Text, JFW will use the screen text if it exists, otherwise, it will use the ALT Text. If neither exists it will use the URL.

If the user selects ALT Text, JFW will always use the ALT Text, if available, otherwise, it will revert to the screen text. If neither exists it will use the URL.

The user is able to toggle this temporarily through the Verbosity dialog, or permanently through the HTML Settings dialog in the Configuration Manager.

**JAWS Keystrokes for Internet Explorer 6.0**

**Insert A**
AddressBar
Reads the Address bar while maintaining the place on the page.

**Insert AA**
moves the JAWS cursor to the address bar.
**Alt D** (an IE 5/6 keystroke)
Selects the text on the Address bar.
Type in a new address, or copy or cut and paste to the clipboard.

**Ctrl Insert Home**
FocusToFirstField
Moves to the first input field in the page and speaks it. If no form field is found, JFW reports, “Input Field Not Found.”

**Alt Left Arrow or Backspace**
GoBack
Loads the previously opened Web page and says the line the user was on prior to leaving this page.

**Alt Right Arrow**
GoForward
Loads the next opened Web page and announces it. JFW places the Virtual PC cursor at the top of the page and says the first line. This is useful when browsing pages.

**Ctrl F**
IE Find
Calls up the Find dialog.

**Tab**
MoveToNextLink
Moves to the next hypertext link or control in the page. Activate a link by tapping **Enter**.

**Insert Enter**
MoveToNonLinkText
Moves to the next block of non-linked text that is larger than 50 characters. (when using the virtual cursor)

**Shift Tab**
MoveToPriorLink
Moves to the prior hypertext link or control in the page. Activate the link by tapping **Enter**.

**Ctrl Tab**
NextFrame
Moves to the frame and says the frame label.

**Ctrl Shift Tab**
PriorFrame
Focuses and reads the previous frame in the HTML order.
**Insert Esc**  
RefreshScreen  
Refreshes the screen and updates the state of information of the Off Screen Model.

**Ctrl Insert Down Arrow**  
ReadCurrentScreen  
Reads the body of the page from the top with the JAWS cursor.  
Note: This is only available in non-virtual cursor mode.

**Ctrl Page Down**  
ReadNextScreen  
Reads the next screen: does a PageDown and begins reading with the JAWS cursor.  
Note: This is only available in non-virtual cursor mode.

**Ctrl Page Up**  
ReadPriorScreen  
Reads the prior screen. Does a PAGE UP and begins reading with the JAWS cursor.  
Note: This is only available in non-virtual cursor mode.

**Insert F5**  
ReformatDocument  
Reformats multiple column pages to be more readable with speech. Rearranges multiple column pages to read in a linear fashion. IE columns are read one after another.  
Note: This is only available in non-virtual cursor mode.

**Insert Tab**  
SaySelectedLink  
Says the focused link or control. If in a dialog, speaks the current control. If in a Web page, announces the link or control with focus.

**Insert F9**  
SelectAFrame  
Brings up a dialog containing a list of the frames present in the page. Select a frame from the list and press **Enter**. The focus moves to the frame selected and speaks its content.

**Insert F7**  
SelectALink  
Brings up a JFW dialog containing all of the links present on the page. Select a link by using the Arrow keys or the first letter of the link. Press **Enter** to open the selected link. TAB between the various controls in the Select A Link dialog.
**Insert F8**
IE Tool Bar access
Allows access to the IE toolbar. While in IE, brings up a dialog box that contains a list of every button that appears on the toolbar. In this dialog, select one of the buttons on the toolbar and press **Enter** to choose it.

**Insert Z**
VirtualPCCursorToggle
Toggles the Virtual PC cursor mode **On** or **Off**. When in a web document, this command toggles between the Conventional mode and the Virtual PC cursor interface.

**Helpful Hints**
When working in Internet Explorer 6.0 with JFW, the user works in one of three modes: Virtual PC cursor mode, Forms mode, or Conventional mode.

It is not possible to use the Context Detection (**Insert F**) option when using the virtual cursor.

**Virtual PC Cursor Mode**
The Virtual PC cursor is activated automatically when IE 6.0 opens, and JFW begins speaking the text on the screen as soon as the page finishes loading. If the newly opened page is loaded, JAWS announces the presence of frames, links, and forms on the page. JAWS will announce if there are no frames, links, or forms on the page.

The Virtual PC cursor works in the Internet Explorer 6.0 environment in much the same way that the PC cursor does in other applications. The Virtual PC cursor responds to normal screen reading keys in the same way, but there is no visual indication on the area of the screen that is being read. In addition, the screen does not automatically scroll, so to bring up text that is out of screen range, use **Insert Esc**.

**Caution**: Manually starting to read before the loading has finished often results in less than all of the text being available.

When reading a Web page with the Virtual PC cursor, select text using the standard Windows text selection keys (e.g., **Shift Right Arrow** to select a character; **Control Shift Right Arrow**) to select word; there is no visual feedback of what is being selected. The SaySelectedText script (**Insert Shift F2**) speaks the text that has been selected.

When a page with frames first comes up, all frames are readable in sequential order. Check with **Insert F1** and JAWS announces: “The page contains frames.”

As the user enters a frame, JAWS says its name, e.g., “Navigation Frame,” JAWS announces the frame name and "end" when the user leaves a frame.
**Ctrl Home** brings the top of the document into view on the visual screen, **Ctrl End** brings the bottom of the document into view on the visual screen, **PageDown** moves down 24 lines, and **PageUp** moves up 24 lines. **SayAll (Insert 2 on numpad)** in line mode reads the document from top to bottom. To stop this reading, tap Ctrl to stop the SayAll function. JAWS positions the cursor near the last item read.

When reading text on a Web page, each link appears to be on its own line, even though this may not be true on the screen. Visited links are identified as “visited.” They are also properly categorized as visited in the Links List dialog. **Note:** When JAWS reads "strange things," the following is probably occurring: when JFW encounters a link that does not have any text associated with it, one of two things is announced. If the link is a CGI link, the name of the graphic is spoken. Otherwise, the last directory component and the file name of the URL is spoken instead.

To quickly skip past headers, press **Insert Enter**. This moves the user down through the page to the first text of at least 50 characters that is not a link. When it arrives at the text, the current line is read.

When the cursor is on a line with a link, pressing **Enter** or **Numpad Slash** activates that link. Subsequently, pressing **Backspace** moves back to the last position on the last page read.

When using the virtual cursor and a link on the screen that has an ALT tag is encountered; JAWS will read the ALT tag.

**How to Turn Virtual Cursor On and Off**

It is not possible to use the reformat option (**Insert F5**) in Internet Explorer (IE) when the virtual cursor is in use. Therefore, if the user wishes to work in the web environment using the JAWS interface of version 3.30, which allows reformatting of web pages, it is necessary to turn off the virtual cursor.

1. With Internet Explorer open, enter Insert 6. The configuration file for IE, browseui.jcf, is opened by the Configuration Manager. (To make this change throughout all applications, load the default configuration file from the Configuration Manager file menu and then do the following.)
2. Enter Alt S to open the Set Options menu.
3. Tap a for Advanced Options.
4. Enter Alt V to toggle the virtual cursor state off.
5. Save the browseui.jcf file by entering Ctrl S.
6. Close the Configuration Manager with Alt F4.

**Note:** To toggle between Virtual PC cursor and PC cursor, press **Insert Z**.
**Forms Mode**

With the Virtual PC cursor positioned on a form field, press **Enter** (not **Num Pad Slash**) key to switch to **Forms Mode**. JAWS will announce "Forms Mode On," and speak the name of the control which has cursor focus. At this juncture, tap **Enter** to activate the PC cursor at the current control.

Possible example: If the user is on a button, the button is pressed. If the user is on a checkbox, the state of the checkbox is toggled. If on a radio button that is unchecked, then the radio button is checked; however, if it was already checked, it remains unchanged. In an edit box, the PC cursor is placed at the top of the edit field. In a combo box, the first item is selected.

**Tab** and **Shift Tab** must be used to move between fields in forms mode. When using these keys for navigation, the natural tab order is used, including any links that may appear between fields. As JAWS lands on the different controls, it announces the new control, such as a link or a field.

While in forms mode it is possible to edit fields using the PC cursor as done normally.

To exit Forms Mode, press **Num Pad Plus** to return to the Virtual PC cursor.

**Note:** JFW remains in Forms Mode until the virtual PC cursor is activated or a new page is displayed, whichever comes first. **Insert Esc** also returns the user to virtual cursor mode and moves the position of the virtual PC cursor to the first control on the current page.

**Tip:** Return to the Virtual PC cursor using the **NumPad Plus**. This turns Forms Mode off.

**Link List Dialog**

When in IE 6.0, bring up the Link List dialog by pressing **Insert F7**. This brings up the Links List view. By default this list is sorted in tab order and shows all links. This List view lists the links on the current page according to the filter and sort order set by the other controls in this dialog. Each time it comes up, it defaults to listing all links in tab order. If the links have the same name but point to different locations, each one is listed in this list view.

Visited links are determined by what IE indicates as a visited link. If IE keeps in memory what links have been visited in the (for example) last 10 days, a link will display as visited until the 10 days are up. It is possible for the user to adjust the time IE keeps links as visited.

The Links List dialog has a display area where in the lower portion of the dialog box. Three radio buttons affecting link display are placed there: **All Links**, which if selected shows all links, **Visited Links Only**, which if selected shows visited links.
Unvisited Links, which if selected shows unvisited links.

The Links List dialog has radio buttons which allow the user to set the way the Links List dialog box displays links. In Tab Order, which if selected, lists the links in tab order; and Alphabetically, which if selected lists the link alphabetically.

There are also three buttons which assist the user in navigating: Move To Link which if selected moves to a link; and Activate Link which if selected moves to an activated link; and Cancel, which if selected closes the Links List dialog.

Alt M
Move to Link button
When activated, closes the dialog box and moves the Virtual PC cursor to that link on the current Web page. Use the navigational keys to explore around the link.

Enter
Activate Link button
Closes the Link List dialog box and activates the selected link. It is also the default button.

The Display group box allows the user to select the radio button to filter the displayed list to display all links (default), visited links only, or unvisited links. It is possible to tab to this group box or use hot keys to change the settings without leaving the list view. Hot keys to change the link display are as follows:

ALT L Display All Links
ALT V Display Visited Links Only
ALT U Display Unvisited Links

The links list can have the links appear in or alphabetically. Tab to this group box or use hot keys to change the settings without leaving the list view. Hot keys are as follows:

ALT T Display links in tab order (default)
ALT P Display links in alphabetical order

In the Links List dialog it is possible to close the dialog box and return to current position on a web page by activating the Cancel button with Alt C or tapping Esc.

Working in Conventional Mode (as in IE 4.01)

Note: To temporarily toggle between Virtual PC cursor and PC cursor, press Insert Z.

By turning off the Virtual Cursor, it is possible to navigate in IE using the JAWS cursor and reformatting options that were used by JFW in IE 4.01. This functionality is not available if the Virtual PC cursor mode is enabled. To find out more about how the JAWS
conventional mode works, see the JFW Help topic "Using JAWS with Popular Applications" section.

**Web Based Activities to Learn to Use JAWS**

The High Tech Center Training Unit has developed a series of web pages designed to be used with JAWS:
http://www.htctu.net/trainings/manuals/tutorials/readweb/start.htm
## Reading Web Pages with JAWS 6 - Internet Explorer 6.0

### Reading Letters and Words

<table>
<thead>
<tr>
<th>ACTION</th>
<th>KEYSTROKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read next character</td>
<td>Right arrow</td>
</tr>
<tr>
<td>Read previous character</td>
<td>Left arrow</td>
</tr>
<tr>
<td>Read current character</td>
<td>Num Pad 5</td>
</tr>
<tr>
<td>Read next word</td>
<td>Insert Right Arrow</td>
</tr>
<tr>
<td>Read previous word</td>
<td>Insert Left Arrow</td>
</tr>
<tr>
<td>Read current word</td>
<td>Insert Num Pad 5</td>
</tr>
</tbody>
</table>

### Reading Lines and Sentences

<table>
<thead>
<tr>
<th>ACTION</th>
<th>KEYSTROKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read next line</td>
<td>Down Arrow</td>
</tr>
<tr>
<td>Read prior line</td>
<td>Up Arrow</td>
</tr>
<tr>
<td>Read current line</td>
<td>Insert Up Arrow</td>
</tr>
<tr>
<td>Read next sentence</td>
<td>Alt Down Arrow</td>
</tr>
<tr>
<td>Read prior sentence</td>
<td>Alt Up Arrow</td>
</tr>
<tr>
<td>Read current sentence</td>
<td>Alt Num Pad 5</td>
</tr>
</tbody>
</table>

### Reading Paragraphs and Pages

<table>
<thead>
<tr>
<th>ACTION</th>
<th>KEYSTROKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read next paragraph</td>
<td>Ctrl Down Arrow</td>
</tr>
<tr>
<td>Read prior paragraph</td>
<td>Ctrl Up Arrow</td>
</tr>
<tr>
<td>Read current paragraph</td>
<td>Ctrl Num Pad 5</td>
</tr>
<tr>
<td>Move to top of page</td>
<td>Ctrl Home</td>
</tr>
<tr>
<td>Move to bottom of page</td>
<td>Ctrl End</td>
</tr>
<tr>
<td>Read to end of page</td>
<td>Insert Down Arrow</td>
</tr>
</tbody>
</table>
## Reading Web Page Tables with JAWS 6

<table>
<thead>
<tr>
<th>ACTION</th>
<th>KEYSTROKES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reads the row and column coordinates, followed by the cell contents and then the appropriate row and column headings.</td>
<td>Ctrl Alt Num Pad 5  <strong>Press Alt after Ctrl and release Alt before Ctrl</strong></td>
</tr>
<tr>
<td>Moves to the next cell in the same row and then announces the column heading followed by cell contents and then the column number.</td>
<td>Ctrl Alt Right Arrow</td>
</tr>
<tr>
<td>This Moves to the previous cell in the same row and then announces the column heading followed by cell contents and then the column number.</td>
<td>Ctrl Alt Left Arrow</td>
</tr>
<tr>
<td>Moves to the cell below the current cell and reads the row heading followed by cell contents and then the row number.</td>
<td>Ctrl Alt Down Arrow</td>
</tr>
<tr>
<td>Moves to the cell above the current cell and then announces the row heading followed by cell contents and then the row number.</td>
<td>Ctrl Alt Up Arrow</td>
</tr>
<tr>
<td>Moves to first cell in current table and reads row and column coordinates followed by contents of the cell.</td>
<td>Ctrl Alt Home</td>
</tr>
<tr>
<td>Moves to the last cell in current table and reads row and column coordinates followed by contents of the cell.</td>
<td>Ctrl Alt End</td>
</tr>
</tbody>
</table>
Using JAWS 6 to Read Forms

<table>
<thead>
<tr>
<th>Instructions</th>
<th>Keyboard Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moves to the first input field in the page and speaks it. If no form field is found, JAWS reports, “Input Field Not Found.”</td>
<td>Ctrl Insert Home</td>
</tr>
<tr>
<td>With the Virtual PC cursor positioned on a form field, enters Forms Mode and speaks the name of the control which has cursor focus. Press Enter to activate the PC cursor at the current control</td>
<td>Enter</td>
</tr>
<tr>
<td>To move to next field in forms mode. When using these keys for navigation, the natural tab order is used, including any links that may appear between fields. As JAWS lands on the different controls, it announces the new control, such as a link or a field.</td>
<td>Ctrl Insert Tab</td>
</tr>
<tr>
<td>To move to previous field in Forms Mode</td>
<td>Ctrl Insert Shift Tab</td>
</tr>
<tr>
<td>To move to last form field</td>
<td>Ctrl Insert End</td>
</tr>
<tr>
<td>To exit Forms Mode and return to the Virtual PC cursor</td>
<td>Num Pad Plus</td>
</tr>
</tbody>
</table>

Reading frames with JAWS 6

JAWS 3.7 was capable of identifying the presence of frames on a web page and moving to the location of each frame. This is maintained in JAWS 4.5. Use normal JAWS web keystrokes for reading the content of the frame.

<table>
<thead>
<tr>
<th>Instructions</th>
<th>Keyboard Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announce the presence of frames on the page</td>
<td>Insert F1</td>
</tr>
<tr>
<td>Bring up a dialog box containing a list of the frames present on the page. Use the Up/Down arrow keys to select a frame from the list and press ENTER. The focus will move to the frame selected and speak its content.</td>
<td>Insert F9</td>
</tr>
<tr>
<td>Move to next frame</td>
<td>Ctrl Tab</td>
</tr>
<tr>
<td>Move to previous frame</td>
<td>Shift Ctrl Tab</td>
</tr>
</tbody>
</table>

Reformatting web pages with JAWS 6

Complex web pages can be automatically reformatted for better screen reader access. Press Insert z to turn off the Virtual PC cursor then press Insert F5 to reformat the screen.

Display all page links with JAWS 6

- For a quick display of all links on the active web page in their tab order, press Insert F7
- Use the Up and Down Arrow keys to navigate the list and hear the link names
- Use the Enter key to go to a selected link.
Basic Web Navigation

JAWS and Internet Explorer 6 provide a variety of ways to perform basic web page navigation. The following keystrokes outline some of these basic functions.

<table>
<thead>
<tr>
<th>Function</th>
<th>Keystrokes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move to and read address bar</td>
<td>Insert a</td>
</tr>
<tr>
<td>Move JAWS cursor to address bar</td>
<td>Insert a a (quickly)</td>
</tr>
<tr>
<td>Select address bar</td>
<td>Alt d</td>
</tr>
<tr>
<td>Search page content</td>
<td>Ctrl Insert f</td>
</tr>
<tr>
<td>Next web page</td>
<td>Alt Right Arrow</td>
</tr>
<tr>
<td>Previous web page</td>
<td>Alt Left Arrow</td>
</tr>
</tbody>
</table>

Notes: