#### Windows Internet Explorer 9 Features at a Glance

#### What's New in Windows Internet Explorer 9 for Customers?

Feedback on Windows Internet Explorer 9 Beta helped shape updates in Windows Internet Explorer 9 Release Candidate (RC). Customers will notice performance improvements, a cleaner experience that puts the focus on their favorite websites and tweaks to the user interface — such as better tab management control, enhanced pinning options and fewer notifications — changes that help make your websites shine.

#### What's New in Windows Internet Explorer 9 for Developers?

Windows Internet Explorer 9 RC includes updates for developers that continue to deliver on our commitments around making Windows Internet Explorer 9 all-around fast, with a focus on your websites, and building on our bet on HTML5 while helping ensure your sites are interoperable with the same markup. With more than 25 million downloads of Windows Internet Explorer 9 Beta to date, we expect customers will be eager to migrate to the final version of Windows Internet Explorer when it's available — making today the time to get your sites ready and join Microsoft Corp. in creating a more beautiful Web.

# **Enjoy an All-Around Fast Experience With Windows Internet Explorer 9**

Designed to take full advantage of your Windows-based computer's hardware, Windows Internet Explorer 9 enables developers to build graphically rich and immersive Web experiences that are as fast and responsive as applications installed on your computer. These new features make the Web all-around fast with Internet Explorer 9 on Windows.

- Hardware-accelerated graphics. As an example of how Windows Internet Explorer 9 takes
  advantage of the power of the whole computer, the rendering of graphics and text has been moved
  from the central processing unit (CPU) to the graphics card (the graphics processing unit), using the
  Direct2D and DirectWrite sets of Windows application programming interfaces (APIs). Hardwareaccelerated text, video and graphics mean that your websites perform like applications installed
  directly on your Windows-based computer.
- New DOM and new JavaScript engine. The newly optimized document object model (DOM) in Windows Internet Explorer 9 provides dramatic speed improvements by interacting more efficiently with Chakra. Chakra, the recently optimized JavaScript engine, interprets, compiles and executes code in parallel by taking advantage of multiple CPU cores. Although each of these is significant on its own, combining these changes, along with using hardware-accelerated graphics, makes the browser all-around fast.
- **F12 developer tools.** Windows Internet Explorer 9 provides built-in developer tools that aid developers in rapid prototyping, testing and debugging Web pages by making changes to code from within the browser itself, which can then be previewed. New in this version of the browser are a useragent switching tool, a network traffic inspector, an improved JavaScript profiler and integrated support for new Web standards introduced with Windows Internet Explorer 9.

### Clean Site-Centric Design Makes Sites Shine and Integrates Them With Windows 7

With a clean look and an increased viewing area, Windows Internet Explorer 9 puts the focus on the things you love and makes your websites shine. Your favorite sites are taken out of the browser box, with **seamless Windows 7 integration.** Features users of Windows 7 love, such as Pinned Sites, JumpLists, Windows Aero Snap and thumbnail controls, all now just work with your websites.

- Clean browser user interface. In Windows Internet Explorer 9, the simplified user interface and site-centric user experience put the focus on the content of each website. By default, only the controls essential for browsing are in the browser frame. The controls in the browser frame are the only ones that users have said they want and use most. This means less screen real estate is taken up by the browser, letting people browse and experience more of what websites have to offer.
- **Pinned Sites.** With Pinned Sites, your favorite websites can be accessed directly from the Windows 7 taskbar without having to first open the browser. You can pin sites to the taskbar by dragging the tab or the icon to the left of the URL to the taskbar. With Pinned Sites, you can easily find and launch those sites you access most often just like native applications on the PC. When a pinned site is launched from the taskbar, the browser frame and navigational controls integrate the site's icon and primary color, emphasizing the site and providing an even more site-focused experience. In addition, it's now possible to pin multiple home pages within a single pinned site in Windows Internet Explorer 9, so multiple Web pages open simultaneously.
- **JumpLists.** With JumpLists, you have a quick and easy way to get to a common website task without having to launch the browser first. For pinned sites where developers have created JumpLists capabilities, you can quickly create a new e-mail message, check your inbox, change your music station, accept a friend invite or see breaking news. The possibilities are endless.
- Windows Aero Snap for your websites. You often need to use more than one website or page to accomplish a task. In Windows Internet Explorer 9 RC, Microsoft has reduced the frame by another three pixels, giving even more room to let your sites shine since the beta release. In addition, tearing off a tab by dragging it away from the browser, and using Windows Aero Snap to position the content, is a great way to show two sites or pages side by side. Some examples include comparing products from different websites, watching a video while going through e-mail or looking at a map while reading an itinerary for a trip. To tear off a tab, click a tab and drag it to the edge of your screen. Content on the site is rendered continuously just like a native application (for example, videos continue to play as you tear off and drag a tab).
- Thumbnail preview controls. Thumbnail preview controls available on the Windows 7 taskbar
  provide quick navigation to the sites that you want to visit. When a site that supports thumbnail
  preview controls is pinned to the Windows taskbar, you can simply click these to control the website
  content (like pause or rewind a video).
- **Icon overlays.** Icon overlays are available on Windows 7 taskbar for pinned sites and provide an indication of personalized website-specific status such as number of new messages.
- Notification Bar. Microsoft has minimized the overall amount of notifications to minimize distractions and help make the browsing experience quieter. When notifications need to be shown in Windows Internet Explorer 9, messages are shown within the user's browsing flow and are designed to be less disruptive. You are not forced to stop browsing to respond to notifications before they can continue browsing. All notifications now appear in the Notification Bar at the bottom of the browser. Messages in the Notification Bar are clearer and help you understand what you need to know. For example, instead of receiving the message "Internet Explorer is not responding," users receive the message "The website is not responding," alerting them to a problem with the site. Notifications such as this one include the website name as part of the notification. In addition, less important notifications will now be automatically dismissed after a short period of time to emphasize higher priority notifications and ensure that lower priority notifications don't get in customers' way.
- **New tab page.** Microsoft knows that when you create a new tab, your intent is to navigate. Windows Internet Explorer 9 focuses on making this experience fast by visually suggesting the sites you want to visit. The new tab page displays tiles for the sites that you visit frequently to help get you where you want to go quickly and without hesitation. Each site is represented by a tile with a large favicon

and a title, and you can track your browsing habits with an activity meter on each tile. From the new tab page, you can also reopen closed tabs, reopen your last browsing session and start an InPrivate Browsing session. On the New Tab Page, Microsoft has revised the delete tab mechanism so when you delete a tile only that site is added to the exclusion list, allowing sites with similar domains to continue appearing on the New Tab Page.

- Tabs. For customers interested in additional room for their tabs in Windows Internet Explorer 9,
  Microsoft has implemented the ability to place tabs on a separate row from the address bar.
  Customers will also experience improved visibility of the active tab and the ability to close background tabs without selecting the tab by exposing the close button on hover. A single tab can also be closed using the close button on the tab, which behaves the same as the frame close button.
- One Box. One Box gives users a single place to start whether they want to navigate to a specific site or search for a site. One Box in Windows Internet Explorer 9 incorporates search functionality into the Address Bar. With One Box, you can navigate to a site, search for a site, switch between search providers, or access browsing history, Favorites, or suggestions from search providers. The information is presented clearly so you can recognize and use it immediately. The privacy of the keystrokes that you enter into One Box is an important part of Windows Internet Explorer 9. By default, the keystrokes you type are kept private. You are more in control of what information gets shared with search providers, such as whether or not you receive search suggestions from a selected search provider as you type in One Box. Text you type in One Box is sent to the search provider as you type it (instead of when you finish typing and press enter), but only if you choose to turn on search suggestions. In Windows Internet Explorer 9, you can now paste and navigate directly in the One Box, giving you the ability to search or go straight to an address using copied text via the default right-click menu or shortcut key.
- Address Bar Top Result. Another new feature that speeds browsing is Address Bar Top Result.
   Address Bar Top Result helps you remember the Web address for common websites by taking you directly to the top results of your search provider without first displaying the search results page. For this behavior to work, the Address Bar Top Result service must be enabled by the search provider.

# Feel the Confidence and Trust That You Are in Control With Windows Internet Explorer 9

Windows Internet Explorer is a trusted way to surf the Web because it has a robust set of built-in security, privacy and reliability technologies that help keep you safer and your browsing experience virtually uninterrupted. These new features help provide the trust you need to feel safer online.

- Tracking Protection. Some content on websites can be used to track your activity as you browse the
  Web. Tracking Protection allows you to limit the browser's communication with certain websites —
  determined by a Tracking Protection List to help keep your information private. Anyone can create
  Tracking Protection Lists, and some are available today.
- ActiveX Filtering. ActiveX is a technology that allows Web developers to create interactive content
  on their sites, but it can also pose a security risk. Windows Internet Explorer 9 RC allows you to block
  ActiveX Controls for all sites, and then turn them back on for only the sites that you trust with the new
  ActiveX Filtering option.
- Download Manager with SmartScreen filter integration. Windows Internet Explorer 9 provides the first download manager with integrated SmartScreen malware protection and introduces SmartScreen download reputation. SmartScreen download reputation is a groundbreaking browser feature that uses reputation data to remove unnecessary warnings for well-known files and shows more severe warnings when the download has a higher risk of being malicious. Users today are often conditioned to ignore generic warnings that are shown for every download. Other browsers show the same warning whether a file is an extremely common program or a piece of malware created literally minutes ago. Windows Internet Explorer 9 is the only browser that uses download reputation to help users make safety decisions.

With the new Download Manager, you can easily view download progress, open content that you've downloaded or cancel a download that is in progress. A default folder is used for all downloaded content, so you can also change the default download destination folder and search the folder for a previous download.

Because file downloads are the primary way for malicious sites to push malware onto computers, Download Manager makes several security-related checks on downloads: It scans for viruses, verifies that an executable file comes from a trusted source, and uses reputation data to inform you of potentially dangerous downloads (service not available in initial release of Windows Internet Explorer 9 Beta, but it will be activated shortly after beta release without the need for users to upgrade).

- Add-on Performance Advisor. Building on the feature in Windows Internet Explorer 8 that exposed
  add-on load time, Add-on Performance Advisor notifies you when add-ons are slowing down your
  browsing session. You are notified if the total load time of all enabled add-ons takes more than 0.2
  seconds, allowing you to make an informed decision to use the add-ons that you find valuable and
  disable those that are less useful or too slow.
- Hang recovery. New in Windows Internet Explorer 9, this feature isolates the impact of a hung tab to the individual tab, so that other tabs and the overall browser continue to operate. When a website hangs because of a long-running script or other operation, it causes your browser to become nonresponsive. Hang recovery in Windows Internet Explorer 9 means you can continue browsing on other tabs. This new feature complements tab isolation and automatic crash recovery, which also helps keep you browsing and prevent the loss of information.
- Compatibility View. You can feel good knowing that your favorite websites will run in the newest version of Windows Internet Explorer. Working with the top sites in the world, Microsoft tests to see how they run on Windows Internet Explorer 9. If Windows Internet Explorer 9 detects a website that has not specified its desired display mode, the Compatibility View button appears next to the Refresh button on the Address Bar. Pressing the Compatibility View button causes Windows Internet Explorer 9 to switch to a legacy document mode. The state of the button is saved for that Web page, eliminating the need to press it again when the user returns to the same page at a later time. You can choose to receive a list of sites best viewed in Compatibility View mode, which Microsoft updates based on input from the top sites. When navigating to a site on the list, Windows Internet Explorer 9 automatically displays the site in Compatibility View mode, without requiring that you press the Compatibility View button.
- Automatic updates. Getting the latest browser updates helps keep you protected over time. You can
  choose to have important updates installed automatically, once they are made available.
   Automatically installed updates can include security updates, critical updates, definition updates,
  update rollups and service packs through Windows Update.
- **Group Policy support.** For IT professionals, Windows Internet Explorer 9 continues to provide excellent Group Policy support. With nearly 1,500 Group Policy settings, including new settings to support Windows Internet Explorer 9 features, IT professionals have the control they need to manage Windows Internet Explorer installations after deployment.

# Write Interoperable Markup With HTML5 and Windows Internet Explorer 9

Extensive support for HTML5, Scalable Vector Graphics (SVG), Cascading Style Sheets Level 3 (CSS3), ECMAScript 5 and DOM provides a new set of capabilities that will help enable developers write one set of markup language and know that it will work and look the same in all modern browsers. Windows Internet Explorer 9 was designed with support for industry standards built in to help ensure that the same markup language works the same across browsers.

• **HTML5 support.** Windows Internet Explorer 9 builds on the work done to implement HTML5 features in Windows Internet Explorer 8 and adds several compelling features. Support for the **video** and

audio elements enables native, hardware-accelerated video and audio content on a Web page without the need for a plug-in. Developers can now insert a video or audio clip onto their page as easily as they do images. Windows Internet Explorer 9 RC also supports playback of H.264 encoded video when a VP8 or WebM video codec is installed. Plus, support for the canvas element enables easy and dynamic graphics rendering, all while taking advantage of hardware acceleration through Windows and the graphics card. In addition, support for the selection APIs enables programmatic selection of text on a page, HTML parsing improvements help make HTML authoring more versatile, and support for several HTML5 semantic tags means elements inherit from HtmlElement so they are styled as specified by default. New to Windows Internet Explorer 9 RC, geolocation is now supported, allowing a Web application to access the current geographical location of the PC running Windows Internet Explorer.

- DOM Level 2 and Level 3. Windows Internet Explorer 9 adds support for more of the DOM Level 2 (DOM L2) and Level 3 (DOM L3) and improves DOM L2 support over existing implementations. These DOM additions are taken from several DOM specifications, including DOM L2 and L3 Core, DOM L2 Views, DOM Element Traversal, DOM L2 and L3 Events, DOM L2 HTML, DOM L2 Style, DOM L2 Traversal and Range, and Web IDL (interactive data language).
- SVG. As the SVG standard has developed, developers have been requesting native support in
  Windows Internet Explorer, and it is available in Windows Internet Explorer 9. Support for SVG in
  Windows Internet Explorer 9 enables powerful, attention-grabbing visuals with incredible detail, all
  without the need for a separate download or plug-in. Like all the graphics, text and media features in
  Windows Internet Explorer 9, SVG in Windows Internet Explorer 9 takes advantage of hardwareaccelerated graphics.
- CSS3. Building on the work that was done in Windows Internet Explorer 8, which is fully compliant
  with the CSS Level 2.1 specification, Windows Internet Explorer 9 adds support for many components
  of CSS3, including CSS3 2D Transforms, enabling even more flexibility and functionality for Web
  designers and developers. Windows Internet Explorer 9 introduces features from several CSS3
  modules, including the Backgrounds and Borders Module, Color Module, Fonts Module, Media
  Queries Module, Namespaces Module, Selectors Module, the Values and Units Module, and support
  for the Web Open Font Format.
- ECMAScript 5. The JavaScript implementation in Windows Internet Explorer 9 is enhanced with
  many features defined by the latest edition of the ECMAScript standard. New ECMAScript 5 features
  introduce significant improvements to the JavaScript language and increase developer productivity. In
  addition, the Windows Internet Explorer 9 DOM is designed to natively support ECMAScript 5,
  providing a consistent and natural programming model for developers when programming the
  Windows Internet Explorer 9 DOM from JavaScript.

#### For more information, press only:

Rapid Response Team, Waggener Edstrom Worldwide, (503) 443-7070, rrt@waggeneredstrom.com