Internet Explorer Compatibility

In recent versions, Windows Internet Explorer has dramatically improved support for established and emerging industry standards, such as HTML5, Cascading Style Sheets (CSS), Level 3 (CSS3), and Scalable Vector Graphics (SVG). By default, Internet Explorer properly displays webpages designed to support these standards. Because some of these standards are still evolving, older websites may not fully support them. In addition, later versions of certain standards specify different behaviors than earlier versions of the same standard.

As a result, websites designed to support the earlier versions of these standards may display differently when viewed with web browsers designed to support current versions of the standards, such as Internet Explorer. In order to help such websites display correctly, Internet Explorer supports a display mode called *Compatibility View*, which displays webpages as if they were viewed by an earlier version of the browser.

The following list describes different ways that enable Compatibility View:

- You click the **Compatibility View** button in the Address bar when viewing a webpage. When displayed, this button appears to the left of the **Refresh** button and contains an image of a broken piece of paper. This enables Compatibility View for all documents in the domain of the website being viewed.
- The "Display all websites in Compatibility Mode setting" in the Compatibility View Settings is enabled.
- The "Automatically recover from page layout errors with Compatibility View" setting is enabled and a webpage stops responding or crashes the browser. When this happens, Internet Explorer opens the page in Compatibility View after recovering from the problem.
- Group policies that identify sites to be opened in Compatibility View are enabled by the administrator of your computer.
- You have used the F12 developer tools to change the browser mode to identify Internet Explorer as an earlier version of the browser.
- The Compatibility View List is enabled, which defines a list of websites that are automatically displayed in Compatibility View.

The Compatibility View List contains a number of websites known to have problems when viewed, by default, with Internet Explorer; when Internet Explorer opens a webpage from a site on the Compatibility View List, it automatically displays the page in a way that allows it to be viewed correctly.

This article describes the Compatibility View List, also known as the Compatibility List. It explains how the Compatibility View List was created, how to determine whether your site is in the list, and how to have your site removed from the list.

In this article:

- Introducing the Compatibility View List
- Understanding Compatibility View
- How the Compatibility View List Was Created
- Determining Whether Your Site Is in the Compatibility View List
- The Structure of the Compatibility View List
- Removing Your Site from the Compatibility View List

Introducing the Compatibility View List

Recent versions of Internet Explorer have steadily and dramatically increased support for established and emerging industry standards, such as such as HTML5, CSS3, and SVG. By default, this support is available only for pages displayed in IE9 Standards mode.

Web authors use doctype directives to specify whether their webpages should be displayed in standards mode or a compatibility mode called "quirks mode." Internet Explorer 9 provides a new standards mode that supports industry standards more completely than the standards modes of earlier versions. By default, Internet Explorer 9 uses IE9 mode to display standards mode webpages. For pages built to support the features of earlier versions of the browser, this can affect what the user sees when the page is displayed. For example, pages that displayed properly in IE7 Standards mode may appear differently when displayed in IE9 mode.

To overcome potential compatibility issues, Internet Explorer supports a feature called *Compatibility View* that allows users to display troublesome pages in IE7 mode. During the development of Internet Explorer 9, users took advantage of Compatibility View and those choices created telemetry data that was later used to generate a list of websites that displayed better when viewed in Compatibility View.

For the final release of Internet Explorer 9, this user feedback was combined with information listing the most highly visited websites per region. This created the Compatibility View List, which automatically displays websites in Compatibility View without further interaction.

The choice to view sites in Compatibility View is always up to the user and can be changed at any time. The Compatibility List can be enabled or disabled through the Compatibility View Settings.

The Compatibility List also provides web developers with additional time to update their sites to support the latest versions of industry standards. This will naturally take time. The Compatibility List is a short-term solution intended to bridge this transition and make it easier for end users to enjoy the web browsing experience.

For more information, see Internet Explorer Blog: Internet Explorer 9's Compatibility View List

Understanding Compatibility View

Before displaying a standards-mode webpage, Internet Explorer checks to see whether the domain name of the website appears in the Compatibility View List. If so, the site is displayed using Compatibility View. If not, and the page contains no other direction, Internet Explorer displays the page in IE9 mode.

When a standards-based webpage is displayed in Compatibility View, the following changes occur:

- Pages are displayed in a mode determined to be appropriate for the site, generally IE7 mode.
- In the user-agent string, the browser identifies itself according to the document mode used to display the site. For example, if the site is displayed in IE7 mode, then the user-agent string contains `MSIE 7.0` instead of `MSIE 9.0`.

- Conditional comments and version vectors recognize the browser as a browser corresponding to the selected document mode. For example, if the site is displayed in IE7 mode, the version vector will be reported as Internet Explorer 7, rather than IE9 mode.

These changes help ensure that users can still use websites that do not fully support the current versions of established and emerging standards.

Note that the X-UA-Compatible header has greater precedence than Compatibility View. If a website is on the Compatibility View List and a page on that site includes an X-UA-Compatible header telling Internet Explorer to display a page in IE9 mode, the page is displayed in IE9 mode. This allows web developers to support IE9 mode on an incremental basis. For more information, see Defining Document Compatibility.

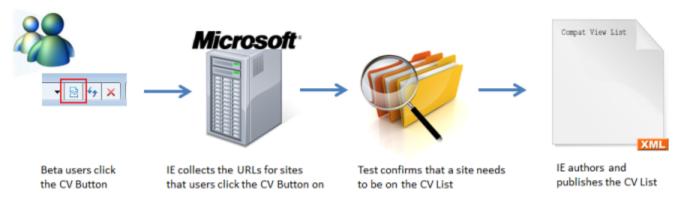## How the Compatibility View List Was Created

The Compatibility View List is based on feedback collected during the development of Internet Explorer 9. Several sources were used:

- Users of pre-release versions were given the option to provide information when they clicked the **Compatibility View** button. This information does not personally identify the user and was obtained only with the user's consent, in accordance with the Internet Explorer Privacy Policy.
- Additional feedback submitted through forums, comments, and other sources of community feedback.

This information was objectively reviewed and collated into a list of the most frequently visited sites, by region.

Note The Compatibility View List supports second-level domains, such as mydomain.example.com and fabrikam.contoso.co.uk. Administrators can use group policies to add specific second-level domains to an organizational Compatibility View List.

To disable the Compatibility View List at any time, use the Compatibility View Settings to disable the "Include updated website lists from Microsoft" setting. Additional settings allow you to further customize the Compatibility View Settings.

| Beta users click the CV Button | IE collects the URLs for sites that users click the CV Button on | Test confirms that a site needs to be on the CV List | IE authors and publishes the CV List |

Determining Whether Your Site Is in the Compatibility View List

The Compatibility View list is an XML file maintained by Microsoft. You can view the list by typing the following in the Internet Explorer Address bar.

```
http://ie9cvlist.ie.microsoft.com/ie9CompatViewList.xml
```

To determine whether your site is on the list, search the file for the domain of your website. If you do not find the domain, your site is not on the list.
Note If your webpages are displayed in Compatability View and your site does not appear on the Compatibility View List, you may be able to use the Console object of the F12 tools to determine the reason. When Internet Explorer 9 displays a page in Compatability View, a message is written to the console. For more information, see How to use F12 Developer Tools to Debug your Webpages.

The Structure of the Compatibility View List

The Compatibility View List is an XML file that contains entries similar to the following (fictional) entries.

```
<domain>adatum.com</domain>
<domain docMode="EmulateIE7">fabrikam.com</domain>
<domain docMode="EmulateIE8">fourthcoffee.com</domain>
<domain featureSwitch="createElementWithMarkup:false">northwindtraders.com</domain>
<domain docMode="EmulateIE8" versionVector="8" uaString="8">woodgrovebank.com</domain>
```

The `domain` element defines the domain name of a site in the Compatibility View List and the attributes of the element, if any, describe how the website is handled by Internet Explorer. The following list describes the effects of the most common attributes:

- If a `domain` element does not contain additional attributes, webpages on the affected site are displayed in IE7 mode if they contain standards-based **doctype** directives or IE5 (Quirks) mode otherwise.
- The `docMode` attribute, when specified, corresponds to a document mode value specified by an X-UA-Compatible header.
- The `featureSwitch` specifies a unique and specific change applied to a very specific set of circumstances. The details of each circumstance vary according to the value of the `featureSwitch` attribute. For example, the `createElementWithMarkup` value indicates that the site relies on non-standard behavior of the `createElement` method.
- The `versionVector` and `uaString` attributes control the way Internet Explorer identifies itself to the website; the attributes are generally necessary when a site attempts to serve specific content to Internet Explorer.

The Compatibility View List can also contain other elements, such as the `gpu` element, that identify drivers known to cause problems with Internet Explorer 9.

Removing Your Site from the Compatibility View List

To remove your site from the Compatibility View List, start by ensuring that your site displays accurately in IE9 mode. Use the F12 tools to change the Browser Mode to Internet Explorer 8 and verify that your site works as expected.

The following tips can help you isolate and understand problems that prevent your sites from working effectively in IE9 mode:

- For best results during this process, make sure your pages do not include any X-UA-Compatible headers and that Compatibility View is disabled, as described earlier.
- The F12 tools let you display your webpages in different document modes; they also help you understand the relationship between the markup in the source of a webpage and the way the page is displayed. As a result, the F12 tools are particularly useful for isolating markup issues.

  Press F12 or select **Developer Tools** from the **Tools** menu to activate the F12 tools. For more information, see Testing Browser and Document Compatibility Modes with the Developer Tools.
- If the **Compatibility View** button appears when you display your webpage, you are viewing the page in IE9 mode. However, the reverse is not true. Several environmental factors can hide the **Compatibility View** button; for more information, see Defining Document Compatibility.

Alternatively, you can use X-UA-Compatible headers to tell Internet Explorer to use a different document mode to render your standards-based webpages. For more information, see Defining Document Compatibility. (This is recommended as a temporary measure while the underlying issues are investigated and resolved.)

To remove your site from the Compatibility View List (or to dispute the removal of your site from the list), have the overall site owner verify that the domain site appears in the Compatibility View List. If it does, send an e-mail to `iepo@microsoft.com` that contains the following information:

- Owner name
- Corporate title
- Company name
- Street address
- Email address
- Telephone number
- Website address

Microsoft will review the provided information and remove your site from the Compatibility View List at the next scheduled update. The supplied information will be used only for the purposes described here and will not be shared with any third party.