

Delaware Web Presentation Guidelines

Purpose

This document outlines web presentation guidelines required by the *Website Common Look and Feel* standard administered by the Department of Technology and Information (DTI) as part of the *Delaware Statewide Information Technology and Architecture Standards*. This document lists the guidelines that all state of Delaware web presentations must meet and provides basic information and tools that state agencies can use to meet those guidelines. Adherence to the state's Web Presentation Guidelines will help state agencies dramatically improve their presentation of state information to residents, visitors, business leaders and other customers via the Internet.

State agencies must meet three primary objectives in creating and managing web content. Agency web pages should be:

- Engineered to ensure access by the broadest possible audience;
- Used to communicate comprehensive, up to the minute information on an agency's mission, activities, services and goals; and
- Designed to provide a common "look and feel" to help ensure that visitors to State of Delaware web sites are able to quickly and easily locate the services and/or information they desire in an intuitive and convenient manner.

Administration

The guidelines in this document have been approved by the Department of Technology and Information. The Delaware Government Information Center (GIC) will provide supplements to this document as needed. In addition to the specific tips and suggestions for compliance included in this document, the GIC will also provide assistance, guidance, and training to agencies on how to accommodate these standards and guidelines.

Implementation

Using CLF 3.0

The Government Information Center (GIC) has developed a new version of the statewide Common Look and Feel (CLF 3.0) that incorporates the look and navigation strategies of the *delaware.gov* web portal and meets the web presentation guidelines in this document. Executive branch agencies are required to use the approved CLF 3.0 unless they meet the waiver requirements contained in the DTI *Website Common Look and Feel* standard.

Agencies using CLF 3.0 will find that the major elements of their web sites meet the guidelines of this document, though it is possible to create content within the CLF 3.0 that will not meet the guidelines. Agency web masters should be aware that deviation from the recommended HTML, CSS, JavaScript, and JQuery tools provided as part of CLF 3.0 increase the risk of violating the guidelines and the DTI *Website Common Look and Feel* standard.

Developing Web Sites Under a CLF 3.0 Waiver

The *Website Common Look and Feel* standard allows for limited waivers from the Common Look and Feel for agencies that can demonstrate a need to develop a unique agency brand in order to gain a competitive advantage. In the past, these have included the Delaware State Lottery, the Tourism Office, Delaware State Parks and similar agencies. Waivers can also be granted for specific legacy or new web applications that cannot be accommodated in the CLF.

Agencies that develop web sites under the waiver provision must still accommodate the remaining web presentation guidelines and any other approved web standards.

Architectural Specifications

Objectives

Adhering to a common architecture standard helps ensure the broadest possible access to agency web pages. Using non-standard web technologies creates increased potential to discriminate against particular citizen groups because additional plug-ins, software, or hardware may be required. The architectural standards in this section are approved and maintained by the Worldwide Web Consortium (W3C) and, if implemented correctly, should result in agency web pages being accessible to the broadest number of users.

Many of the guidelines that ensure greater accessibility to web pages are designed to also make those pages more responsive and useful on a variety of devices, from full PC screens to smaller smartphone and handheld devices. More and more users of web content are accessing that content through smaller and smaller devices. It is important for state agencies to provide information to citizens where and how citizens are used to finding information. Delaware residents should not have to change how they access web content when they are looking for state government information.

Standards

State agency web sites, whether using the Common Look and Feel or developed outside of CLF 3.0 on a waiver, must adhere to the following high-level standards:

- Accessibility – Agency web pages should be compatible with assistive technologies.
- Metatags – Agency web pages should include appropriate metatags in head sections to ensure maximum compatibility with web search engines.
- Hypertext Markup Language (HTML5) – Agency web pages should be developed using the HTML5 specification.
- Cascading Style Sheets (CSS) – Agency web pages should be developed using the latest CSS. The 2013 update to CLF (CLF3.0) uses CSS3 Cascading Style Sheets.
- Responsive Design – Agency web pages should be responsive and usable from a variety of web devices sizes and types. The CLF3.0 update sets the groundwork for responsive web sites into the future.
- Browser Compatibility – Agency web pages should be compatible with a broad selection of possible web browsers.

Each of these standards is detailed in the following sections. Web pages developed using the new Common Look and Feel (CLF 3.0) will generally meet or exceed these standards.

Accessibility

State agency web pages must be designed and maintained to work for all people, regardless of their hardware, software, language, culture, or physical or mental ability. Pages should be accessible for persons with differing levels of hearing, movement, sight, and cognitive ability.¹ Note also that agency web pages funded by federal monies may also have to meet the requirements of Section 508² of the Rehabilitation Act (29 U.S.C. 794d), as amended by the Workforce Investment Act of 1998 (P.L. 105-220), August 7, 1998.

While citizens using state agency web pages will be the ultimate judges of the accessibility of those pages, agencies should test their sites for accessibility using resources such as the Web Accessibility Evaluation Tool (WAVE) provided by WebAIM³, a non-profit organization within the Center for Persons with Disabilities at Utah State University. The WAVE tool tests web pages for many accessibility issues and looks for possible compliance issues with many of the Section 508 and WCAG guidelines. It also flags potential accessibility problems not specified in the usual guidelines and standards. It is designed as guidance for web developers as they consider all aspects of web design, including accessibility.

Metatags

Each web page for a state agency should include basic metadata contained in “metatags” in the head element of the page. Among other functions, basic metadata elements allow search engines to properly locate and identify pages for web surfers. In an environment in which the user more frequently navigates to a portion of an agency web site by searching for a specific thing⁴ on Google, Bing or other search tools, it is important to accurately mark each page with what that page is and what needs it might fill.

Delaware state agency web pages must include at least the following three metatags:⁵

- **Description**
`<meta name="description" content="This page contains...">`
The description element should provide a succinct description of the contents of that particular page. It is important that each page have a unique description tag.
- **Keywords**
`<meta name="keywords" content="keyword1, keyword2, etc ">`
Keywords should include all possible search terms with which a user might be expected to find the web site. As a general rule, it’s best to limit this to about 20 keywords or phrases per page.
- **Title**
`<title>State of Delaware - <!--#include virtual="/usr/CLF_site_title_child_name.html"--> - [page name]</title>`
Note that the “title” element incorporates an agency-maintained server-side include (SSI) file to help maintain consistency. It is important that site titles consistently follow this format: “State of Delaware - <agency name> - <page name>”

¹ See <http://www.w3.org/standards/webdesign/accessibility>

² See <https://www.section508.gov/>

³ See <http://wave.webaim.org/>

⁴ For example, a user seeking to purchase an annual parks pass is more likely to simply search Google for “[Delaware state park passes](#)” and will find several appropriate pages. The user might not ever start with the State Parks home page (though it is a very nice page).

⁵ Note that tags denoting metatags should be all lower-case in order to be recognized by facebook when posting links to state content on facebook.

Hypertext Markup Language (HTML)

Hypertext Markup Language (HTML) is the online publishing language (“code”) used to create web documents and to format and present information on those documents. It includes support for a variety of elements such as graphics, multimedia, lists, and forms. Products supporting both the creation of original HTML documents and the conversion of existing documents to HTML formats are available. These authoring tools vary widely in orientation, capabilities, and the quality of HTML they generate. Creating and maintaining web pages requires some rudimentary knowledge of programming syntax and a basic understanding of HTML.

State agency web sites should be developed to comply with at least the HTML 4.01 Specification⁶ published as a formal recommendation by the World Wide Web Consortium (W3C) in 1999. Sites developed using the latest version of the state’s Common Look and Feel (CLF 3.0) will comply with the HTML5 Specification⁷ now being implemented by the W3C.

Web pages and portions of HTML code can be checked for validity using the Markup Validation Service⁸ provided by the W3C.

Cascading Style Sheets (CSS3)

Cascading Style Sheets are a mechanism for controlling the presentation elements of web pages, such as colors, layout, and fonts. Style sheets are maintained separate from HTML documents to allow for global application, and easy updating and changing, of stylistic elements to web pages.

State agency web pages should use CSS where ever possible. Those pages and sites developed using CLF 3.0 will use portions of the CSS3 latest generation modules of CSS.⁹

Cascading Style Sheets can be checked for validity using the CSS Validation Service¹⁰ provided by the W3C.

Responsive Design

Web users should be able to access state agency web content on any standard web-browsing devices in any location. Each web page should render in a useful and appropriate way on devices ranging from full-size PC screens, on laptops, on pad devices and on Smartphone devices. Responsive web design assumes that pages are built so as to be usable on the smallest screens.

The CLF 3.0 templates and architecture have been designed to model this behavior. They are configured to allow agencies to publish content once and have it appear on all sizes of browser screen. Using HTML5 and CSS3 allows pages to be designed with elements that automatically rearrange to fit different screens. At smaller screen sizes, some elements will disappear or retreat behind touch-activated buttons.

Browser Compatibility

State agency web pages should be compatible with and tested on many different operating systems and web browsers, including at least the following listed browsers.. Each is listed with the oldest version of

⁶ See <http://www.w3.org/TR/html401/>

⁷ See <http://www.w3.org/TR/html51/>

⁸ See <http://validator.w3.org/>

⁹ See http://www.w3.org/standards/techs/css#w3c_all

¹⁰ See <http://jigsaw.w3.org/css-validator/>

the browser that state agency pages should be compatible with. It is assumed that pages will be compatible with newer versions as well.

- Internet Explorer: Version 7.0
- Firefox: Version 3.0
- Safari: Version 4.0
- Chrome: Version 14.0
- Opera: Version 10.0
- iPhone: IOS 3.0
- iPad: IOS 3.2
- Android:
 - Samsung Galaxy
 - Motorola Droid
 - Motorola Atrix
- Opera Mobile:
 - LG Optimus
 - Samsung Galaxy
 - Motorola Droid

Look and Content Specifications

Objectives

If state agencies meet the standards in this section, their web sites will be more accessible, and visitors to state agency web sites will know that they are getting the best information and assistance possible. The standards of this section will help state agencies save time and effort in developing and maintaining their web sites.

The new Common Look and Feel (CLF) developed by the Government Information Center provides a central tool for reaching these goals. The CLF features a common approach to branding, usability, accessibility, and navigation. This section also helps guide agencies to find ways to ensure that frequently requested information is readily available and that important policies are visible.

Standards

State agency web sites should meet the following standards:

- Common Look and Feel – State agency web sites should adhere to a common “look and feel” to facilitate citizen use of the web to communicate with state government agencies.
- Common Navigation – Agencies should have similar navigational structures.
- Common Components – Agencies should provide core information on their web sites.

Common Look and Feel

Delaware residents, businesses and visitors have come to depend on finding nearly all state agency web sites using the same basic design and navigational structure. This Common Look and Feel makes navigation easier and helps assure users that they are in the right place, interacting with a state government that is consistent and dependable.

It is worth noting that most users who are not state employees do not readily draw distinctions between different agencies. Users don't care to see a distinct personality on the website of Agency A to distinguish it from Agency B. They simply want to find information that pertains to them. Users of state agency web sites care more about the information they are seeking than about which cabinet department has charge of that information.

There are, however, exceptions to this rule. Some agencies and programs (State Tourism, Parks, Lottery, etc.) may meet the waiver requirements found in the DTI *Website Common Look and Feel* standard. These are agencies that, for reasons of competitive advantage or business-related factors, need to

distinguish themselves from the standard Delaware state government look and feel. A waiver may also be granted for specific legacy or new web applications that cannot accommodate the CLF. Agencies that obtain a waiver for the CLF must still accommodate the remaining content specification standards and any other approved web standards.

Common Navigation

State agency web sites should use a common navigational approach to help users find the information they are looking for across many agency sites.

All agency web pages should, at a minimum, include links to the delaware.gov portal page. The CLF “portal to go” header provides this link, along with a multi-search box that provides search navigation of the agency site, the whole state web enterprise, and a phone directory search tool. The “portal to go” also provides a selection of basic governmental links including elected officials, the branches of government, major agencies and more.

The basic navigational approach of the Common Look and Feel, detailed in the document *CLF 3.0 Navigation and Taxonomy*, is to divide content into three basic areas: Home, Services, and Information. Items under the “Home” heading provide basic information about the agency, including the agency mission statement, contact and location information, news, help, and programs or divisions. Items under the “Services” heading are major services provided by the agency to the public, including on-line services or services offered in person at agency offices, such as license renewal, filing of taxes, application for benefits, etc. Items under the “Information” heading are links to documents, publications, data and listings of information relevant to the agency and its clients and constituents.

Web page footers should include at least a link back to the agency home page and to agency contact information. Footers should also include a link to the delaware.gov portal, state-level contact and help links, and a link to the state privacy policy.

Common Components

Web visitors should expect to find at least basic information about state agencies when they visit the web sites of those agencies. Because of the wide variation in types of agencies for which web sites are maintained, the requirements for this standard are necessarily vague. The following items are highly recommended:

- Explanation of what the agency does, its mission and goals.
- Where the agency offices are location, preferably in both map and address formats.
- Contact information, including telephone and e-mail.

Agency Website Development Practices

Objectives

Even the best-designed and programmed web site will fail if the content it carries is not of interest to or useful for, the public. The purpose of state agency web sites is to facilitate communication between citizens and their government and Delaware state agency web sites must keep this goal always in mind.

The standards in this section will help agencies focus their web site content and ensure that they provide appropriate information in a form and manner that can be effectively used.

Standards

- Non-Technical Input – Web sites should be developed by a diverse group that represents and speaks to all facets of an agency’s constituency.
- User/Customer Perspective Testing – Agencies should test their sites from user perspectives.
- Portal Integration – Agencies should ensure integration of their pages with the delaware.gov web portal.
- Usage Monitoring – Agencies should use web traffic statistics to modify and improve the information posted on their sites.

Non-Technical Input

While web sites are created using technical information technology tools and practices, their content should be developed by teams that include non-technical staff. In particular, an agency web site should be a part of the agency’s public information strategy. Content should be at least vetted, if not originally developed by, the agency Public Information officer and staff.

Tools that allow for direct web posting of information from program leaders and experts (including blogs and social media tools) should be encouraged and integrated with agency web site wherever possible.

User/Customer Perspective Testing

Agencies should test their web sites in a variety of web browsers and on a variety of devices to ensure they will work across a broad spectrum on platforms. These tests should include at least the browsers listed in the Browser Compatibility section of this document as well as on various sized PCs and laptops, pad-style devices and smartphones. Agencies should also look for opportunities to gather feedback on their sites from non-technical and non-agency users.

Portal Integration

The state portal (<http://delaware.gov>) serves as a central point of entry for many web users. Even with the growth of search engines as “front pages,” the state portal continues to play an important role in guiding web users to Delaware agency information. It is important for agencies, therefore, to maintain close contact with the portal team at the Delaware Government Information Center (GIC) to ensure that their web sites are properly listed on the portal’s various topics pages and search databases. In addition, agencies should look for opportunities to partner with GIC to highlight important programs and events.

Usage Monitoring

Web traffic and usage monitoring can help agencies identify which web pages are most in demand, and therefore likely most useful. Agencies should include web traffic monitoring tools, such as Google Analytics, and should periodically review the results and data to determine which parts of their site are most used. These portions of the sites should be kept most fresh. Low usage numbers may indicate parts of the site that can be cut or which should be radically re-worked.