1. **Purpose**
   Facilitates enterprise-wide interoperability and standardization for internet, intranet, and extranet facing websites.

2. **Scope**
   This Information Technology Policy (ITP) applies to all departments, boards, commissions and councils under the Governor’s jurisdiction. Agencies not under the Governor’s jurisdiction are strongly encouraged to follow this ITP.

3. **Policy**
   All agencies are to follow the formats and standards included in this policy for both internal and outsourced creation and implementation of websites. Portal projects hosted within the Commonwealth infrastructure are required to use the current standards and best practices defined by this ITP.

   All new or modernized websites managed by agencies under the Governor’s jurisdiction must adhere to the Pennsylvania Design Standards (PDS) as detailed in OPD-SFT002A *Pennsylvania Design Standards*. External suppliers providing website solutions to these agencies must adhere to OPD-SFT002A.

   **Content Management**
   The Commonwealth’s portal includes a component which provides content management. This makes it easier to publish new content to portal pages, interactive communities and applications hosted in the portal framework. Using content management, business users without web programming skills can create form-based web content in a controlled, consistent way.

   Content templates allow business users to create and publish new content based on pre-existing models and layouts, and make it easy to cascade similar changes across pages and sites. Features such as publishing, workflow, library services, and integrated administration make it easy for individual business content publishers and portal administrators to work in parallel rather than in conflict with one another. This allows business users without web development skills to create visually rich content for portal pages, communities and applications.

   **Information Technology (IT) Accessibility Requirements**
   Agencies, boards, councils, and commissions are responsible for ensuring their websites are designed to all web design and application development requirements specified in ITP-ACC001 *IT Accessibility Policy* and all applicable federal and state regulations and laws.

   **Commonwealth Language Access Plan**
   Agencies, boards, councils, and commissions are responsible for ensuring their websites are
designed to all web design and application development requirements specified in the Commonwealth Language Access Plan (forthcoming).

General Web Page Design Guidelines
Websites shall be designed with the target audience in mind, not personal preferences. Each website is to:

- Be easy to read;
- Be easy to navigate;
- Be accessible to a wide range of users;
- Follow defined enterprise branding specifications;
- State the page title on each page; and
- Integrate documentation content into the site design rather than as a downloadable option. (NOTE: Sites can provide both options but prioritize integration into the site design.)

Web page layout and design are to be consistent throughout the entire site. Website administrators and content publishers are to place strong emphasis on the quality of the content presented. Artwork/graphics presented on the website are to compliment the content, but not overwhelm it. An effective web design provides useful information, rather than trying to attract visitors with effects. Web content publishers are not to overly rely on extraneous effects for message presentation. Content is to be logically presented in a consistent manner throughout the site and to provide intuitive navigation. Content should integrate with document translation services for non-native language users to the fullest extent possible. Refer to the Commonwealth Language Access plan for additional guidance.

Commonwealth Branding Standard for Agencies under the Governor’s Jurisdiction
In an effort to present constituents with a cohesive, Commonwealth-branded interface for web services, web design guidelines have been developed for use on Commonwealth websites. The guidelines help to deploy a branded and universal graphical user interface, while still allowing the agencies to maintain a degree of autonomy and creativity on agency sites. These specifications can be found in Management Directive 205.40 Commonwealth Branding.

Hypertext Links/URLs
Link descriptions are to aid users to locate relevant information. Links are to use text that is descriptive and intuitive (e.g., avoid "click here" as text for a hyperlink). Hyperlinks are to be checked and maintained regularly to verify their validity as broken hyperlinks may cause users to question the reliability of the site.

As web pages are created, correct links to pages depend on the correct directory and the file structure. Use relative links instead of absolute links when linking to pages within a Commonwealth website (e.g., a relative link (/index.html) would be found, while an absolute link (http://www.state.pa.gov/pavist/index.html) would not be found, if the directory or server site name was changed).

For agencies under the Governor’s jurisdiction, all websites are required to use the pa.gov domain. (Refer to ITP-NET005 Commonwealth External and Internal Domain Name Services (DNS) for details).

Website Naming Conventions
Websites are to follow the website naming conventions set forth in ITP-NET005 Commonwealth External and Internal Domain Name Services (DNS). This ITP states that all internet accessible services that are provided by agencies will be registered within pa.gov domain.
Directory Structure and Filenames
Use lowercase letters for all filenames. Standardize on a naming convention for the filenames to reflect the content of the files. Be consistent in and with extensions. Do not include special characters (e.g., @, %, &) or spaces in naming of the files or directories. Use of underscore (_) or dash (-) is preferable to the use of special characters.

Acronyms and Terminology
Where possible, continue to simplify and distinguish terms. Spell out acronyms to reduce potential confusion or lack of clarity for users not familiar with government organizations or services.

Cookies
Persistent cookies are only to be used with web analytics tools that do not collect Personally Identifiable Information. Personally Identifiable Information includes any data that could potentially be used to identify a particular person.

Multimedia
Sound and video files, as well as streaming audio and video, may be added to sites provided that:

- All multimedia files are developed in compliance with ITP-ACC001 IT Accessibility Policy which requires closed captioning, or a transcript be associated with all internal and external Commonwealth-produced videos; and
- Users receiving complete file transmission instructions are notified of file size.

Streaming media requires higher bandwidth availability for satisfactory performance. Agencies designing streaming media services are to contact the Office of Administration, Office for Information Technology, Enterprise Technology Services Office (OA/OIT/ETSO) in advance to discuss options and to ensure no negative impact to Commonwealth IT infrastructure.

Legal Review
Agency program managers are responsible for working with their respective Legal Counsel to:

- Verify the agency’s right to use all software, information, graphics, photographs, and text on the site;
- Evaluate potential liability associated with site content; and
- Content review and approval.
- The responsibilities for content review and approval are as follows:

  - Agency communications offices are responsible for the user interface design and the placement of content into the structure of agency websites. Agency communications offices are to collaborate with business owners for the creation and approval of content.
  - Information technology offices are responsible for implementing the user interface design and facilitating the process of maintaining content on agency websites.
  - Communications offices are responsible for collaborating with information technology offices to develop technically feasible user interface designs that conform to Commonwealth standards.
  - Agency websites are to follow the Commonwealth Style guides issued by the Governor’s Office.

Web Analytics
Web analytics tools provide data, charts and graphics to analyze website traffic. The primary use of web analytics tools is to effectively organize and locate web pages to best meet business
goals and objectives. Web analytics tools capture data such as:

- Number of new and repeat visitors;
- Number of page views;
- Visitor demographics; and
- Visitor click paths for entering and exiting pages.

Web analytics tools use captured data for the correlation and analysis of web traffic enabling business users to:

- Determine user trends;
- Target demographic groups;
- Understand user preferences and online behaviors;
- Confirm how effectively a website meets visitor needs and expectations;
- Identify how well a website fulfills business objectives; and
- Deliver more targeted and relevant e-mail campaigns by measuring open, click-through, and unsubscribe rate.

### Current Standards for Web Analytics Tools

(These technologies meet the requirements of the current architecture and are recommended for use.)

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<thead>
<tr>
<th>Technology or Product</th>
<th>Product or Platforms</th>
<th>Technology Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Analytics</td>
<td>All</td>
<td>Current</td>
</tr>
<tr>
<td>WebTrends</td>
<td>All</td>
<td>Current</td>
</tr>
</tbody>
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### External Linking Requirements

External Websites are defined as those websites not under the management or control of the Commonwealth of Pennsylvania. This policy is intended primarily for the Commonwealth’s public-facing websites, but agencies are encouraged to apply it to their intranet websites as well.

A. **External Linking Policy Notice:**

The Office of Administration, in coordination with the Governor’s Office, will maintain a link located within the footer area of all Commonwealth agency public-facing websites, or in another reasonably conspicuous and accessible location on the site, that displays the External Linking Policy Language, as follows:

**External Linking Policy and Disclaimer**

The information posted on Commonwealth websites may include hypertext links, or pointers, to information created and maintained by other public and/or private organizations (outside websites). We only provide these links and pointers for your information and convenience. When you select a link to an outside website, you are leaving the Commonwealth site and are subject to the privacy and security policies of the owners/sponsors of the outside website.
The Commonwealth of Pennsylvania does not control or guarantee the accuracy, relevance, timeliness, or completeness of information contained on an outside website.

The Commonwealth of Pennsylvania does not endorse the organizations sponsoring outside websites and does not endorse the views they express or the products/services they offer.

The Commonwealth of Pennsylvania cannot authorize the use of copyrighted materials contained in outside websites. Users must request such authorization from the sponsor of the outside website.

The Commonwealth of Pennsylvania is not responsible for transmissions users receive from outside websites.

The Commonwealth of Pennsylvania cannot guarantee that outside websites comply with accessibility requirements.

In instances where Commonwealth agencies maintain their own public-facing websites, those agencies must include the External Linking Policy and Disclaimer Language in the footer area of those sites, or in another reasonably conspicuous and accessible location on the site.

**B. Choice and Display of External Website Links**

It is important for every agency which places links to external websites on its public-facing web pages to take reasonable steps to evaluate those links, and to ensure the external websites are displayed in a way consistent with law and Commonwealth policy.

- Ensure external links are closely related to the subject matter of the web page.
- A .gov internet domain may not be used to advertise for private individuals, firms, or corporations.
- Ensure external links are checked for “breakage” (i.e. 404 Not Found Error) at reasonable intervals.

**4. Responsibilities**

**4.1 Office of Administration, Office for Information Technology (OA/OIT):**

In coordination with the Governor’s Office, OA/OIT will maintain a link located within the footer area of all Commonwealth agency public-facing websites that displays the External Linking Policy Language.

**4.2 Commonwealth Agencies**

Websites maintained by agencies must adhere to guidelines listed in this ITP including:

- Adding and maintaining the External Linking Policy and Disclaimer Language in the footer area of those sites and ensure external links are following applicable policy and laws.
- Conform with the Design Standards set in OPD-SFT002A Pennsylvania Design Standards (PDS) for all new and modernized Commonwealth-managed websites.
5. Related ITPs/Other References

Commonwealth policies, including Executive Orders, Management Directives, and IT Policies are published on the Office of Administration’s public portal: http://www.oa.pa.gov/Policies/Pages/default.aspx

- Management Directive 205.34 Commonwealth of Pennsylvania Information Technology Acceptable Use Policy
- Management Directive 205.40 Commonwealth Branding
- Management Directive 210.5 State Records Management Program
- Commonwealth Language Access Plan (forthcoming)
- OPD-SFT002A Pennsylvania Design Standards (PDS)
- Pennsylvania Design Standards: https://www.pa.gov/design-standards
- ITP-ACC001 Information Technology Accessibility Policy
- ITP-NET005 Commonwealth External and Internal Domain Name Services (DNS)
- ITP-PLT019 Web Server/Application Server Standards ITP-SEC019 Policy and Procedures for Protecting Commonwealth
- Electronic Data
- ITP-SEC020 Encryption Standards for Data at Rest
- ITP-SEC031 Encryption Standards for Data in Transit
- ITP-SFT000 Systems Development Life Cycle Policy
- ITP-SYM006 Desktop and Server Software Patching

6. Authority

Executive Order 2016-06 Enterprise Information Technology Governance
Executive Order 2019-04 Establishing a “Citizen-First” Government and Promoting Customer Service Transformation

7. Publication Version Control

It is the user’s responsibility to ensure they have the latest version of this publication, which appears on https://itcentral.pa.gov for Commonwealth personnel and on the Office of Administration public portal: http://www.oa.pa.gov/Policies/Pages/default.aspx. Questions regarding this publication are to be directed to RA-ITCentral@pa.gov.

8. Exemption from This Policy

In the event an agency chooses to seek an exemption from the guidance within this IT policy, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to ITP-BUS004 IT Waiver Review Process for guidance.

This chart contains a history of this publication’s revisions. Redline documents detail the revisions and are available to CWOPA users only.
<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Purpose of Revision</th>
<th>Redline Link</th>
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</table>
| Original    | 02/22/2017 | Base document  
Moved to Software domain from Application, including ITP number change  
Replaces ITP-APP005 Commonwealth of PA Website Standards, ITP-APP007 Commonwealth of PA External Website Linking Policy, TP-APP029 Portal Technology Standards, ITP-APP039 Web Analytics Policy ITPs | N/A                   |
| Revision    | 04/01/2020 | Revised ITP title, replaced “Website” with “Design”  
Removed outdated design guidance throughout  
Added OPD-SFT002A Design Standards requirement                                                                                                           | Revised IT Policy Redline <04/01/2020> |