

Information Technology Policy

Commonwealth of PA Design Standards

Number

ITP-SFT002

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Category

Software

Supersedes

All Prior Versions or None

Contact

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Scheduled Review

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1. Purpose

This [Information Technology Policy \(ITP\)](#) establishes design standards for Commonwealth internal and public-facing websites, applications, and [digital content and services](#).

2. Scope

This ITP applies to all departments, offices, boards, commissions, and councils under the Governor's jurisdiction (hereinafter referred to as "agencies"). Agencies not under the Governor's jurisdiction are strongly encouraged to follow this ITP.

Third-party vendors, licensors, contractors, or suppliers shall meet the policy requirements of this ITP that are applicable to the products or services provided to the Commonwealth.

3. Policy

All Agencies shall follow the formats and standards defined by this ITP when designing, developing, and implementing Commonwealth internal and public-facing websites, applications, and digital content and services.

All new or modernized Commonwealth internal and public-facing websites, applications, and digital content and services managed by agencies must adhere to the Pennsylvania Design Standards (PDS) as detailed in OPD-SFT002A *Pennsylvania Design Standards*. External suppliers providing website, application, and digital content and service solutions to these agencies must also adhere to OPD-SFT002A.

All Commonwealth-owned mobile apps shall reside within the Commonwealth's mobile app stores, including those developed for the Commonwealth by external third-party suppliers.

Content Management

The Commonwealth's website portal includes a component that provides content management. This makes it easier to publish new content to website pages, applications, and digital services within the website 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 website 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 website portal pages, applications, and digital content and services.

Information Technology (IT) Accessibility Requirements

Agencies are responsible for ensuring their internal and public-facing websites, applications, and other digital content and services are designed to the web design and application development requirements specified in [ITP-ACC001 Information Technology Digital Accessibility Policy](#) and all applicable federal and state regulations and laws.

Commonwealth Language Access Framework

Agencies are responsible for ensuring their internal and public-facing websites, applications, and other digital content and services are designed to the web design and application development requirements specified in the [Commonwealth Language Access Framework](#), as applicable.

General Design Guidelines

Internal and public-facing websites, applications, and digital content and services shall be designed with the target audience in mind, not personal preferences. Each website, application, and digital content and service shall:

- 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 design rather than as a downloadable option. (NOTE: Both options can be provided within the design. Integration into the design is mandatory whereas download is optional.)

Page layouts and designs shall be consistent throughout the entire website, application, and digital content and services. Administrators and content publishers shall place strong emphasis on the quality of the content presented. Artwork and graphics presented within the solution shall complement the content, but not overwhelm it. An effective design provides useful information, rather than trying to distract visitors with effects. Content publishers shall not overly rely on extraneous effects for message presentation. Content shall be logically presented in a consistent manner throughout the solution and 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 Framework](#) for additional guidance.

Commonwealth Branding Standard for Agencies

In an effort to present constituents with a cohesive, Commonwealth-branded interface for websites, applications, and digital services, design guidelines have been developed for use on Commonwealth websites, applications, and digital services. 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 websites, applications, and digital services. These specifications can be found in [Management Directive 205.40 Commonwealth Branding](#).

Hypertext Links/URLs

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

As web pages, applications, and digital services 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 internal and public-facing website, application, and digital service (e.g., a relative link (/index.html) would be found, while an absolute link (http://www.state.pa.gov/pavisit/index.html) would not be found, if the directory or server site name was changed).

Agencies shall make sure that all websites, applications, and digital services use the pa.gov domain. Refer to [ITP-NET005 Commonwealth External and Internal Domain Name Services \(DNS\)](#) for details.

Naming Conventions

Websites, applications, and digital services shall follow the naming conventions set forth in [ITP-NET005 Commonwealth External and Internal Domain Name Services \(DNS\)](#). This ITP states that the pa.gov domain must be used.

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. Using an underscore (_) or dash (-) is preferable to using 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 shall only 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. Refer to [ITP SEC025 - Proper Use and Disclosure of Personally Identifiable Information \(PII\)](#) for additional information.

Multimedia

Sound and video files, as well as streaming audio and video, may be added to websites, application, and digital services provided that:

- All multimedia files are developed in compliance with [ITP-ACC001 Information Technology Digital Accessibility Policy](#), which follows the latest version of the Web Content Accessibility Guidelines (WCAG) by requiring 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 shall 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 website, application, and digital service;
- Evaluate potential liability associated with websites, applications, and digital content and services; 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, applications, and digital services. Agency communications offices shall 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, applications, and digital services.
 - Communication offices are responsible for collaborating with information technology offices to develop technically feasible user interface designs that conform to Commonwealth standards.
 - Agency websites, applications, and digital services shall follow the Commonwealth Style guides issued by the Governor's Office.

Web Analytics

Web analytics tools provide data, charts, and graphics to analyze website, application, and digital service traffic. The primary use of web analytics tools is to effectively organize and locate 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, which enables business users to:

- Determine user trends;
- Target demographic groups;
- Understand user preferences and online behaviors;
- Confirm how effectively a website, application, and digital service meets visitor needs and expectations;
- Identify how well a website, application, and digital service fulfill 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.)

Technology or Product	Product or Platforms	Technology Classification
Google Analytics For less than 5 million page views per month	All	Current
WebTrends	All	Current

External Linking Requirements

External websites, applications, and digital services are defined as not under the management or control of the Commonwealth of Pennsylvania. This policy is intended primarily for the Commonwealth's public-facing websites, applications, digital content and services, but agencies are encouraged to apply it to their intranet websites as well.

External Linking Policy Notice:

The OA, in coordination with the Governor's Office, will maintain a link located within the footer area of all Commonwealth agency public-facing websites, applications, and digital services, 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, applications, and digital services 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, application, or digital service, you are leaving the Commonwealth digital solution and are subject to the privacy and security policies of the owners/sponsors of the outside digital solution.

- The Commonwealth of Pennsylvania **does not** control or guarantee the accuracy, relevance, timeliness, or completeness of information contained on an outside website, application, or digital service.
- The Commonwealth of Pennsylvania **does not** endorse the organizations sponsoring outside websites, applications, or digital services 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, applications, or digital services. Users must request such authorization from the sponsor of the outside website, application, or digital service.
- The Commonwealth of Pennsylvania **is not** responsible for transmissions users receive from outside websites, applications, or digital services.
- The Commonwealth of Pennsylvania **cannot** guarantee that outside websites, applications, or digital services comply with accessibility requirements.

In instances where Agencies maintain their own public-facing websites, applications, or digital services, those agencies must include the External Linking Policy and Disclaimer Language in the footer area of those websites, applications, or digital services, or in another reasonably conspicuous and accessible location as outlined in ITP-PRV001 *Commonwealth of PA Electronic Information Privacy Policy*.

Choice and Display of External Links

It is important for every agency that places links to external websites, applications, or digital services on its public-facing web pages, applications, and digital services takes reasonable steps to:

- Evaluate those links and ensure the external websites, applications, and digital services 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, application, and digital service.
- Ensure that a pa.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.

Mobile App Stores

The Commonwealth established an Apple and Google Play store to provide a single online destination for citizens to have one location to download Commonwealth mobile apps. A single online destination enables citizens and businesses to locate mobile apps, even if they do not know which agency created them and helps to improve citizen experience with Commonwealth services.

The OA/OIT maintains the mobile apps stores and associated store access rights for agencies to publish and maintain respective mobile apps.

The stores are subject to change control for granting access rights to Commonwealth employees or third-party external suppliers, and for publishing new mobile apps to the stores. The OA, in coordination with the Governor's Office, reviews and approves change control requests to uphold service integrity and to ensure new mobile apps published to the stores are also added to the Commonwealth's Mobile Apps website

located at www.pa.gov/apps.

Changes to mobile app store terms and conditions are also subject to change control. When Apple or Google Play store terms and conditions are updated, they are first reviewed for form and legality by the Office of General Counsel for OA before the new terms and conditions are accepted within the stores.

4. Responsibilities

4.1 Agencies:

Websites, applications, and digital services maintained by agencies or external third-party suppliers shall adhere to guidelines listed in this ITP including:

- Adding and maintaining the External Linking Policy and Disclaimer Language in the footer area of those websites, applications, and digital services, and ensuring external links are following applicable policy and laws.
- Conforming with the Design Standards set in OPD-SFT002A *Pennsylvania Design Standards (PDS)* for all new and modernized Commonwealth websites, applications, and digital services.

Commonwealth Mobile Apps developed and maintained by agencies or third-party external suppliers shall adhere to guidelines listed in this ITP.

4.2 Office of Administration, Office of Information Technology (OA/OIT):

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

In coordination with the Governor's Office and Office of General Counsel, OA/OIT shall maintain the Commonwealth's Mobile App Stores following change control procedures.

4.3 Third-party vendors, licensors, contractors, or suppliers providing website or application solutions to the Commonwealth shall comply with the requirements outlined in this ITP.

5. Related ITPs/Other References

- Definitions of associated terms of this policy are published on the Office of Administration's public portal: <http://www.oa.pa.gov/Policies/Pages/Glossary.aspx>
- 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](#) Amended *Commonwealth of Pennsylvania Information Technology Acceptable Use Policy*
- [Management Directive 205.40](#) *Commonwealth Branding*
- [Management Directive 210.5](#) *The Commonwealth of Pennsylvania State Records Management Program*

- [Commonwealth Language Access Framework](#) (Commonwealth authorized personnel only. For information contact: RA-ITCentral@pa.gov)
- Commonwealth Mobile Apps website: www.pa.gov/apps
- OPD-SFT002A *Pennsylvania Design Standards (PDS)*
- Pennsylvania Design Standards: <https://www.pa.gov/design-standards>
- Pennsylvania Privacy Policy statement: <https://www.pa.gov/privacy-policy/>
- [ITP-ACC001](#) *Information Technology Digital Accessibility Policy*
- [ITP-NET005](#) *Commonwealth External and Internal Domain Name Services (DNS)*
- [ITP-PLT019](#) *Web Server/Application Server Standards*
- ITP-PRV001 *COPA Electronic Information Privacy Policy*
- [ITP-SEC019](#) *Policy and Procedures for Protecting Commonwealth Electronic Data*
- [ITP-SEC025](#) - *Proper Use and Disclosure of Personally Identifiable Information (PII)*
- [ITP-SEC031](#) *Encryption Standards*
- [ITP-SFT000](#) *Systems Development Life Cycle (SDLC) Policy*
- [ITP-SYM006](#) *Commonwealth IT Resources Patching Policy*

6. Authority

- [Executive Order 2016-06](#) *Enterprise Information Technology Governance*
- [Executive Order 2016-07](#) *Amended Open Data, Data Management, and Data Governance*
- [Executive Order 2019-04](#) *Establishing a "Citizen-First" Government and Promoting Customer Service Transformation*

7. Publication Version Control

It is the [Authorized 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 ITP, a request for a policy waiver is to be submitted via the enterprise IT policy waiver process. Refer to [ITP-BUS004 IT Policy Waiver Review Process](#) for guidance.

This chart contains a history of this publication's revisions. Redline documents detail the revisions and are available to Commonwealth users only.

Version	Date	Purpose of Revision	Redline Link
Original	02/22/2017	Base document Moved to Software domain from Application, including ITP number change	N/A

ITP-SFT002 - Commonwealth of PA Design Standards

		Replaces ITP-APP005 <i>Commonwealth of PA Website Standards</i> , ITP-APP007 <i>Commonwealth of PA External Website Linking Policy</i> , TP-APP029 <i>Portal Technology Standards</i> , ITP-APP039 <i>Web Analytics Policy</i> ITPs	
Revision	04/01/2020	Revised ITP title, replaced "Website" with "Design" Removed outdated design guidance throughout Added OPD-SFT002A Design Standards requirement	N/A
Revision	04/08/2021	<ul style="list-style-type: none"> • Clarified the purpose of the policy • Added third parties to scope • Clarified throughout the document that the policy is applicable to websites, applications, and digital content and services rather than just website • Added a section regarding mobile app stores • Updated responsibilities • Updated and added reference 	Revised IT Policy Redline <04/08/2022>