Information Technology Policy

Enterprise Software and Application Development Standards

Number: ITP-SFT009
Effective Date: February 22, 2017

Category: Software
Supersedes: All Prior Versions

Contact: RA-ITCentral@pa.gov
Scheduled Review: May 2023

1. Purpose

This Information Technology Policy (ITP) establishes enterprise-wide standards and guidance for software and application development technologies.

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 that utilize Commonwealth IT Resources 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 and services provided to the Commonwealth.

3. Objective

- Leverage existing software solutions and applications across multiple agencies for common business functions.
- Provide a uniform approach to application development.
- Enhance and promote standardization.
- Reduce training costs and facilitate enhanced support services by having the same languages in use throughout the Commonwealth.
- Achieve substantial savings in person/time support costs over a period of time by reducing the number of languages supported.
- Decrease time to production for applications.
4. **Policy**

Prior to investing in new applications or software, agencies shall review the [Enterprise Service Catalog](#) to determine if an Enterprise Standard Service Offering exists that addresses their business needs. If an Enterprise Standard Service Offering is identified in the Enterprise Service Catalog, agencies shall adhere to the guidance in [ITP-BUS007 Enterprise Service Catalog](#) regarding the use of that service offering.

New application development projects that require the use of an application development language, integrated development environments (IDE), web development frameworks, and forms development tools shall use the current application development standards as defined in STD-SFT009A [Enterprise Application Development Technology Standards](#).

Major revisions to existing application development projects that are not using the current standards will be reviewed as part of the [ITP-BUS001 IT Planning and Projects](#) to determine if the investment warrants a change in standards at that time.

Agencies implementing forms solutions shall incorporate usability testing as part of application quality assurance. Usability testing shall assess the form solution’s ability to:

- Provide good quality information to users
- Gather good quality information from users
- Reduce processing costs
- Increase user satisfaction

Agencies implementing forms solutions shall comply with [ITP-ACC001 Information Technology Digital Accessibility Policy](#).

Agencies implementing form solutions shall assess the level of security and privacy associated with the data in the form. Forms solutions requiring authentication and authorization services shall comply with [ITP-SEC039 Keystone Login and Identity Proofing](#).

5. **Responsibilities**

5.1 **Agencies shall:**
- Review the service offerings of the Enterprise Service Catalog to determine if an enterprise standard exists that will address the business need.
- Adhere to the standards in STD-SFT009A [Enterprise Application Development Technology Standards](#).
- Comply with all other requirements as outlined in this ITP.

5.2 **Office of Administration, Office for Information Technology shall** comply with the requirements as outlined in this ITP.

5.3 **Third-party vendors, licensors, contractors, or suppliers** developing applications on behalf of Commonwealth entities shall comply with the requirements as outlined in this ITP.
6. **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](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](http://www.oa.pa.gov/Policies/Pages/default.aspx)
- **Management Directive 205.34 Amended Commonwealth of Pennsylvania Information Technology Acceptable Use Policy**
- **ITP-ACC001 Information Technology Digital Accessibility Policy**
- **ITP-BUS001 IT Planning and Projects**
- **ITP-BUS007 Enterprise Service Catalog**
- **ITP-SEC005 Commonwealth Application Certification and Accreditation**
- **ITP-SEC039 Keystone Login and Identity Proofing**
- **ITP-SEC014 Identity Protection and Access Management (IPAM) Architectural Standard**
- **ITP-SFT000 Software Development Life Cycle (SDLC) Policy**
- **ITP-SYM006 Commonwealth IT Resources Patching Policy**
- **ITP-BUS002 IT Investment Review Process**

7. **Authority**

   Executive Order 2016-06 Enterprise Information Technology Governance

8. **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](https://itcentral.pa.gov) for Commonwealth personnel and on the Office of Administration public portal: [http://www.oa.pa.gov/Policies/Pages/default.aspx](http://www.oa.pa.gov/Policies/Pages/default.aspx). Questions regarding this publication are to be directed to RA-ITCentral@pa.gov.

9. **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](https://itcentral.pa.gov) 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>
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<tbody>
<tr>
<td>Original</td>
<td>02/22/2017</td>
<td>Base Document&lt;br&gt;Moved to Software domain from Application, including ITP number change</td>
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Added References section
Added Apple Swift language to App Dev Language
Current Standard Added Apple XCode to IDE Current Standard
Removed Microsoft Visual Studio 2005 from Contain (Retire)

<table>
<thead>
<tr>
<th>Revision</th>
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<tr>
<td></td>
<td>04/27/2018</td>
<td>Revised Web Development Framework standards Moved ITP Definitions to Policy Glossary</td>
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|          | 05/12/2022 | • Utilizing Accessible ITP template
• Updated policy title
• Added language to objective regarding leveraging solutions across multiple agencies
• Added language around reviewing the Enterprise Service Catalog to determine if an enterprise standard exists and a reference to ITP-BUS007
• Moved the standards tables into a new supplemental document STD-SFT009A
• Updated References
• Updated Exemption section to remove COPPAR reference | [Revised IT Policy Redline](<05/12/2022>) |