

# Information Technology Policy

## *Electronic Commerce Interfaces*

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ITP-INT003

**Effective Date**

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**Category**

Integration

**Supersedes**

ITP-INT B2

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### 1. Purpose

This Information Technology Policy (ITP) establishes the guidelines for the creation and implementation of internal, as well as outsourced Electronic Commerce interfaces and data transactions.

### 2. Scope

This ITP applies to all entities on or connected to the Commonwealth Enterprise Network including all offices, departments, boards, commissions, councils, or any other organization (hereinafter referred to as "agencies"). 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. Definitions

**Distributed Software Programs:** Computer programs that are developed and distributed to end users. They can range from simple user interfaces for data entry to complex applications that provide the users with tools for managing their information.

**Electronic Commerce or E-Commerce:** The activity of electronically maintaining relationships and conducting business transactions that include buying or selling information, services, and goods by means of computer telecommunications networks or over the internet.

**Electronic Data Interchange (EDI):** The concept of businesses electronically communicating information that was traditionally communicated on paper, such as purchase orders, invoices, or other information or data exchanges. EDI implies a sequence of messages between two parties, either of whom may serve as originator or recipient. The formatted data representing the documents may be transmitted from

originator to recipient via telecommunications or physically transported on electronic storage media. The usual processing of received messages in EDI is by computer only. Human intervention in the processing of a received message is typically intended only for error conditions, for quality review, and for special situations.

**Open Data Protocol (OData):** An open protocol that allows the creation and consumption of queryable and interoperable REST APIs in a simple and standard way.

**Representational State Transfer (REST):** A software architectural style which uses a subset of Hypertext Transfer Protocol (HTTP). It is commonly used to create interactive applications that use Web Services.

**Simple Object Access Protocol (SOAP):** A messaging protocol specification for exchanging structured information in the implementation of web services in computer networks. It uses XML Information Set for its message format, and relies on application layer protocols, most often HTTP

#### 4. Objective

To ensure agencies develop and implement Electronic Commerce technologies that facilitate enterprise-wide interoperability and standardization.

#### 5. Policy

Decisions on what type of Electronic Commerce Interface to use shall be made in conjunction with the other key Electronic Commerce components, formats, transport mechanisms, and legal or security considerations. As with any electronic solution, it should satisfy the business requirements in an effective, efficient manner and must be consistent with the Commonwealth's enterprise standards as outlined in [STD-INT002A, Electronic Commerce Standards](#).

All Electronic Commerce interfaces, regardless of type (i.e., web, Distributed Software Programs, business application systems, [Commercial-off-the-Shelf \(COTS\)](#), etc.) shall:

- Be compatible with applicable Commonwealth enterprise and desktop computing standards.
- Avoid proprietary or non-standard interfaces.
- Conform to national or international EDI standards such as XML (via Internet or other transport mechanisms).
- Adhere to all related Commonwealth and Office of Administration, Office for Information Technology (OA/OIT) policies.

#### **Web Interfaces**

Dynamic web interfaces shall use Hypertext Markup Language (HTML) or XML, and which one of these interfaces is used for a particular system will depend upon business need.

#### **Web Services**

Web services shall be compliant and compatible with Commonwealth web development standards. Web services shall use SOAP or OData messaging protocol specifications for

exchanging structured information in the implementation of web services in computer networks.

### **Business Application Systems**

Users that have comprehensive data management applications often use their existing systems to translate data into the recipient's, or from the sender's, specified format. When driven by business needs, these interface programs shall consider using EDI standards.

### **Additional Interface Considerations**

Electronic Commerce interfaces should consider:

- Incorporating data quality checks into the interfaces as much as possible, regardless of sending or receiving information.
- Including, when applicable, a mechanism to ensure the person completing the submission understands the legal responsibilities associated with the submission. For example, some interfaces require the sender to read certification language before they can enter data.
- Developing user-friendly interfaces as much as practical, including edits, help screens, means for additional support, etc.
- Developing, where applicable, multiple media interfaces within a single Electronic Commerce application.

## **6. Responsibilities**

### **6.1 Agencies shall:**

Ensure that Electronic Commerce technologies facilitate enterprise-wide interoperability and standardization and meet the requirements outlined in this ITP.

### **6.2 Office of Administration, Office for Information Technology shall:**

Comply with the requirements as outlined in this ITP.

### **6.3 Third-party vendors, licensors, contractors, or suppliers shall:**

Comply with the requirements of this ITP that are applicable to the products and services provided to the Commonwealth.

## **7. 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 210.12 Amended, Electronic Commerce Initiatives and Security\*](#)
- [\*ITP-ACC001, Information Technology Digital Accessibility Policy\*](#)

- [ITP-INT002, Electronic Commerce Formats and Standards](#)
- [STD-INT002A, Electronic Commerce Standards](#)
- [ITP-PLT017, Desktop and Laptop Operating System Standards](#)
- [ITP-SFT000, Software Development Life Cycle \(SDLC\) Policy](#)
- [ITP-SFT001, Software Licensing](#)
- [ITP-SFT009, Application Development](#)

## 8. Authority

[Executive Order 2016-06, Enterprise Information Technology Governance](#)

## 9. 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 shall be directed to [RA-ITCentral@pa.gov](mailto:RA-ITCentral@pa.gov).

## 10. 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 shall 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 CWOPA users only.

Version	Date	Purpose of Revision	Redline Link
Original	7/27/1999	Base Document	N/A
Revision	08/09/2021	<ul style="list-style-type: none"> <li>• ITP Refresh</li> <li>• Updated Policy Number for consistency</li> <li>• Added to current ITP template</li> <li>• Added third-party vendors to Scope and Responsibilities Sections</li> <li>• Added Definition Section</li> <li>• Updated Policy, Related ITPs, and Exemption Sections</li> </ul>	N/A
Revision	01/20/2023	<ul style="list-style-type: none"> <li>• ITP Refresh</li> <li>• Consolidated policy requirements and removed repetitive or unnecessary language</li> <li>• Updated responsibilities and references</li> </ul>	<a href="#">Revised IT Policy Redline &lt;01/20/2023&gt;</a>