

Information Technology Policy

Business Intelligence Policy

ITP Number ITP-INF010	Effective Date March 23, 2009
Category Information	Supersedes None
Contact RA-ITCentral@pa.gov	Scheduled Review June 2022

1. Purpose

This Information Technology Policy (ITP) establishes enterprise-wide standards and policies for Business Intelligence (BI) core infrastructure technologies. Establishing standards will provide guidance to agencies as they plan for new application development projects or make investments in existing applications.

Provides a mechanism for agencies to collaborate with the Office of Administration, Office for Information Technology (OA/OIT) in order to publish information per Executive order, Management Directives and related ITPs.

2. Scope

This ITP applies to all offices, departments, 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 and services provided to the Commonwealth.

3. Background

BI applications provide historical, current, and predictive perspectives of business operational data. Business operational data is typically extracted from operational data stores, transformed, and loaded into a data warehouse;-- although business requirements will sometimes justify working from operational data.

From the context of this policy, BI core infrastructure is treated separately from data warehousing. (See ITP-INF004: *Data Warehousing Policy*.) Additionally, this policy does not address loosely coupled technologies that are typically found in BI implementations, such as reporting and dashboards. (See ITP- INF011: *Reporting Policy* and ITP-INF012: *Dashboard Policy*.)

This policy addresses BI technologies centered on Online Analytical Processing (OLAP) engines, data mining, modeling, and business content tools for extraction, modeling, searching, and information retrieval.

STD-INF010A: *Business Intelligence Product Standards* provides guidance to agencies on the current standards and the status of other BI solutions that are being used or being considered for use.

GEN-INF010B: *Business Intelligence Product Availability* provides information on the availability and licensing of current BI product standards.

4. Definitions

4.1 Business Analytics : Refers to the skills, technologies, and practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning. Business Analytics focuses on developing new insights and understanding of business performance based on data and statistical methods. In contrast, business intelligence traditionally focuses on using a consistent set of metrics to both measure past performance and guide business planning. In other words, business intelligence focusses on description, while Business Analytics focusses on prediction and prescription.

4.2 Data Visualization: The process of graphically representing information and data. This context can make trends and patterns inherent in the data more explicit that may not otherwise be explicit in text-based data. Use of visual elements like charts, graphs, and maps, Data Visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data

4.3 Service Principal: A Service Principal is the local representation, or application instance, of a global application object in a single tenant or directory. A Service Principal is a concrete instance created from the application object and inherits certain properties from that application object

5. Policy

Agencies shall leverage the BI solution provided by Integrated Enterprise Systems (IES) for Enterprise Resource Planning (ERP) applications when the IES BI solution meets agencies business requirements. ERP applications include financial, human resources, customer relationship management, supplier relationship management, platform life cycle management, supply chain management, and material management enterprise applications.

Agencies requiring BI solutions for non-ERP related applications shall use one of the current standards as defined in STD-INF010A.

Agencies shall coordinate with OA/OIT to ensure compliance requirements are achieved with all BI solutions.

Agencies shall ensure the appropriate security and process controls are applied by OA/OIT to ensure the confidentiality, integrity and availability of the data in accordance with the data owner's requirements.

Agencies shall ensure all public facing instances of BI solutions comply with related ITPs.

Agencies shall ensure OA/OIT leverages a Service Principal to protect permissions to data sources. Agencies may not produce BI reports or dashboards for public consumption that contain personally identifiable information or other close records as documented in ITP-SEC019 *Policy and Procedures for Protecting Commonwealth Electronic Data*.

6. Responsibilities

6.1 Agencies shall leverage the BI solution provided by IES for ERP when the solution meets their business requirements.

Agencies shall follow the standards defined in STD-INF010A and comply with all ITPs when the BI instance is public facing.

Agencies shall coordinate with OA/OIT to ensure compliance.

Agencies shall ensure appropriate security and process controls are applied by OA/OIT.

6.2 Third-party vendors, licensors, contractors, or suppliers performing custom Application development work shall comply with the requirements outlined in this ITP.

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*
- ITP-ACC001 *Information Technology Digital Accessibility Policy*
- ITP-BUS004 *IT Policy Waiver Review Process*
- ITP-INF000: *Enterprise Data and Information Management Policy*
- ITP-INF004: *Data Warehousing Policy*
- ITP-INF011: *Reporting Policy*
- ITP-INF012: *Dashboard Policy*
- ITP-SEC005: *Commonwealth Application Certification and Accreditation*
- ITP-SEC019: *Policy and Procedures for Protecting Commonwealth Electronic Data*
- ITP-SFT003: *Geospatial Enterprise Service Architecture*
- STD-INF010A: *Business Intelligence Product Standards*
- GEN-INF010B: *Business Intelligence Product Availability*

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 are to be directed to RA-ITCentral@pa.gov.

10. 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 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	03/23/2009	Base Document	N/A
Revision	11/19/2010	ITP Refresh	
Revision	06/04/2021	ITP Refresh New ITP Templates and updated language Added Definitions Updated Scope, Responsibilities and Exemption sections	Revised IT Policy Redline <06/04/2021>