

CIO-111: Software Development Life Cycle Policy

EFFECTIVE DATE: 8/09/2021

REVISED: 7/20/2022

REVIEWED: 6/06/2022

I. PURPOSE

This policy establishes controls addressing the approach to software development. The controls provide guidance in decision-making and practices that optimize resources, mitigate risk, and maximize return on investments.

II. POLICY

1. Definitions

- a) "Software Development Life Cycle (SDLC)" – means the consistent and repeatable process in which the Commonwealth Office of Technology (COT), or an agency, plans, develops, tests, deploys and maintains software, including custom software developed for the Commonwealth and Commercial-Off-The-Shelf (COTS) software customized or configured for the Commonwealth.

2. Software Development and Implementation

The development of software presents numerous benefits to the Commonwealth, but also includes risks such as data breaches, maintenance and support costs, interoperability challenges, failed implementations, etc. Consequently, this policy establishes the responsibilities for managing software through the Software Development Life Cycle.

COT and agencies shall ensure all projects developing and/or implementing software comply with all enterprise policies, best practices and standards established for the Commonwealth including, but not limited to:

- a) Enterprise IT Policies – Policies applicable to all Commonwealth information technology.
- b) Project Management Framework – Establishes the basic conceptual structure for Commonwealth information technology projects. The SDLC is one component of the overall project life cycle.
- c) Information Security Policies, Standards and Procedures – Establish how agencies must ensure the security and privacy of software at various points within the SDLC and COT CIO-106 Enterprise Privacy Policy.
- d) Kentucky Information Technology Standards – Defines the application development technologies approved for new software development and provides processes for requesting exceptions to enterprise IT standards.

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III. CORRECTIVE OR DISCIPLINARY ACTION

Each agency shall ensure that all relevant staff within their organizational authority are aware of and comply with this policy. The agency is responsible for enforcing it. Unauthorized and/or neglectful actions regarding this policy may result in disciplinary action up to and including dismissal. COT may require additional service charges for remediation efforts due to non-compliance with this policy.

IV. APPLICABILITY

All executive branch agencies and non-executive branch agencies using COT-managed infrastructure or services shall adhere to this policy. This includes employees, contractors, consultants, temporaries, volunteers, and other workers within state government. Organizations may modify this policy to fulfill their responsibilities but must obtain approval through an exception request. Staff should refer to their internal policy, which may have additional information or clarification.

V. REFERENCES

KRS 42.726

CIO-106 Enterprise Privacy Policy

Commonwealth of Kentucky Enterprise Project Management Framework