

Version Control and Hosting Standard

Introduction

Version control, also known as source code control or just source control, relates to the need to manage the change history of source code within a system over time. All OMES custom source code must be version controlled and it is the developer's responsibility to ensure this is the case for all code they work with or for which they are responsible. All OMES source code should also use Git and be hosted in GitHub.

Purpose

This document defines and outlines the procedures software developers should use when contributing code to custom software developed by OMES.

Definitions

COBOL - Common Business Oriented Language.

Standard

- Azure DevOps – Agencies within the State of Oklahoma use Azure DevOps for software project and enhancement management, scrum team collaboration and automated building and released custom software. Agencies use GitHub for source code hosting. All customer application source code uses Git for version control and is hosted in GitHub unless an exception waiver and approval has been obtained.
- Git – Agency custom development Git is the default choice. Git works well with agile project development and the continuous integration/continuous deployment tool within Azure DevOps and other Microsoft development tools. Git tools outside of Microsoft tools are supported.
- File based – In some situations, it may be difficult to store source code in Git (i.e. COBOL as part of a mainframe system or Microsoft Access applications.) In this case, Git offers large file storage support options.
- GitHub visibility – GitHub repositories must be private or internal and only shared with contributors. A repository with an internal visibility designation can be viewed by all members of the enterprise while private visibility is only within the agency organization. The continuous integration/continuous deployment tool within Azure DevOps can connect to repositories hosted on GitHub.
- Alternate repository hosting system: If Git is not available for version control or host repositories on GitHub, additional approval is needed from leadership.

Compliance

This standard shall take effect upon publication and is made pursuant to Title 62 O.S. §§ 34.11.1 and 34.12 and Title 62 O.S. § 35.8. OMES IS may amend and publish the amended standards policies and standards at any time. Compliance is expected with all published policies and standards, and any published amendments thereof. Employees found in violation of this standard may be subject to disciplinary action, up to and including termination.

Rationale

To coordinate and require central approval of state agency information technology purchases and projects to enable the chief information officer to assess the needs and capabilities of state agencies as well as streamline and consolidate systems to ensure that the state delivers essential public services to its citizens in the most efficient manner at the lowest possible cost to taxpayers.

References

- [Agile project development.](#)
- [Azure DevOps.](#)
- [Azure pipelines documentation.](#)
- [Git.](#)
- [Git large file storage.](#)
- [GitHub.](#)
- [Setting repository visibility.](#)

Revision history

This standard is subject to periodic review to ensure relevancy.

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