

Systematization of Versioning and Release Management Approaches in Open-Source Projects Based on Ruby

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Abstract: *This article examines the system of version and release management in open-source projects developed in the Ruby programming language. Special attention is given to the application of the Semantic Versioning standard, Git and GitHub Actions tools for release process automation, as well as the role of conventions and changelog formats in ensuring transparency and development stability. The structure and practices of dependency maintenance using tools such as Bundler and Dependabot are studied, along with mechanisms for compatibility control and project stability during version updates. It explores the impact of automation and standardization on project maintenance quality and their significance for reliability and predictability within the Ruby open-source ecosystem.*

Keywords: Ruby, open source, version management, Semantic Versioning, release, GitHub Actions, release cycle, Bundler.

