

On Updating Library Dependencies in OSS Projects

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Abstract

Third-party library reuse has become common practice in contemporary software development, as it includes several benefits for developers. Library dependencies are constantly evolving, with newly added features and patches that fix bugs in older versions. To take full advantage of third-party reuse, developers should always keep up to date with the latest versions of their library dependencies. In this talk, present several work related to the update of library dependencies.

We present an empirical study on library migration. The results suggest that developers are not likely to prioritize a library update, as it is perceived to be extra workload and responsibility. Furthermore, we found that even though third-party reuse is common practice, updating a dependency is not as common for many developers. Hence, towards this goal, I will be presenting some of our work in the form of visualizations and tools developed to assist developers update their libraries.

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