The Comparative Study of Binary Artifact Repository Managers

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Abstract : One of the primary component of Continuous deployment (CD) is a binary artifact repository — the place where artifacts are stored with metadata in a structured way. The binary artifact repository manager (BARM) is a software, which implements this repository logic and exposes a public application programming interface (API) for managing these artifacts. Almost every programming language ecosystem has its own artifact repository kind. During creating Artipie — BARM constructor and server, we analyzed and implemented a lot of different artifact repositories. In this paper we present criterias for comparing artifact repositories, and analyze the most popular repositories using these metrics. We also describe some of the notable features of different repositories. This paper aimed to help people who are creating, maintaining or optimizing software repository and CI tools.