EXECUTIVE BRIEF

ACCELERATE AND FORTIFY SOFTWARE DELIVERY WITH BINARY MANAGEMENT

Binaries (a.k.a artifacts, packages, libraries, components, etc.) are the valuable building blocks of your software applications. Every day, development teams create new binaries leveraging a variety of technologies and incorporating existing binaries (first- and third-party) as part of their new creations.

Due to factors including the open-source movement, growth of connected devices, globally distributed teams, and increased pace of development there is an explosion of binaries for organizations to manage - creating potentially unlimited points of failure in a given software supply chain (SSC). For example, distributed dev teams need to leverage consistent package versions to ensure their microservice apps work together and open-source libraries create unknowns including vulnerabilities, version, and compliance concerns.

As organizations grow the scrutiny and exposure of their software, and what comprises it, only increases. It is therefore imperative that organizations have policies, processes, and tools in place that enable organization-wide visibility and control over binaries being leveraged as part of the SSC while accelerating and automating DevOps and security workstreams.

**CHALLENGES:**

**ADAPTING TO SHIFTING TECHNOLOGY PREFERENCES**

The average enterprise development organization uses over a dozen different package types in application development. Developers want to use their preferred languages and tools without being hamstrung by organizational policies. Foundational DevOps tools must be flexible to support a diverse and evolving technology ecosystem such as multi-cloud support.

**MANAGING DEPENDENCIES AND CONTROLLING VERSIONS**

Automating development processes and moving towards continuous updates necessitates trust in binaries that are being leveraged throughout your software. Appropriate versions of artifacts and dependendecies must be reliably available for developer use and CI/CD pipelines anywhere in the world to avoid velocity slowdowns.

**APPLYING SECURITY AND COMPLIANCE EFFORTS CONSISTENTLY**

Binaries managed in disparate places increases the likelihood they will be overlooked when applying security policies/tools. When new vulnerabilities are discovered, organizations must quickly identify if binaries in their SSC contain specific vulnerable packages/libraries, if they were impacted, and respond in kind. For truly secure SSCs, binaries must be verified and policies enforced continuously.

**KEY TAKEAWAYS**

- Binaries are the lifeblood of your development organization
- The explosion of binaries creates many potential points of failure in an org’s SSC
- Moving towards continuous updates and releases requires trust in your binaries
- Binary management is essential to fortifying and accelerating development
- JFrog helps organizations create a circle of trust around their binaries and control how they’re used
HOW JFROG CAN HELP:

CENTRALIZE MANAGEMENT WITHOUT SACRIFICING FLEXIBILITY
Enable dev teams to use any technology through a single, best-of-breed binary management solution with native support for 30+ package and file types and expansive ecosystem integrations out-of-the-box. As your artifacts’ volume and variety skyrocket, centrally store, manage, and track all your binaries and dependencies across your software supply chain in a single place.

MASTER YOUR SOFTWARE SUPPLY CHAIN
Control the way binaries enter, advance, and are leveraged throughout your SSC - from development to release to archival. Understand the interrelationships of all your binaries across limitless endpoints. Industry leading metadata capture and customizable tags provide robust visibility into binary usage, traceability, and the ability to create automated rules/policies based on binary metadata.

DEPLOY A CONSISTENT SECURITY POSTURE ACROSS YOUR ORG
Apply security and compliance policies consistently to all software components in your SSC by managing them in a single system that introduces essential best practices. Know what’s in your software and where it came from to protect your customers and quickly respond to new vulnerabilities.

A SEAMLESS PATH TO ULTRA SCALE
Support a global operating and distribution model with efficient and reliable binary delivery no matter where artifacts are generated or consumed. Meet or exceed the most stringent software delivery, user experience, and SLA performance metrics while ensuring seamless operation across your premises, your multi-cloud instances and your edge.

ARE YOU PREPARED FOR BINARY MANAGEMENT AT SCALE?

IN 2021 JFROG OBSERVED...

- Largest number of artifacts managed by a single organization: 150M+
- Average artifacts managed for orgs w/ ~260 users: 380K+ & 68 repositories
- Average number of package types leveraged by Enterprise accounts: 15

With the JFrog DevOps Platform, you can unify, accelerate and secure your software delivery, from development to distribution. The JFrog Platform offers deeper Dev, Sec, and Ops integration, in a flexible, and expandable platform that delivers increased security, visibility, and control on-premise, in the cloud, and at the edge.