Sonatype

SOLUTION OVERVIEW

NEXUS REPOSITORY

The Nexus Repository solution helps organizations build better, safer software - even faster. To accelerate development and innovation, applications are built by assembling proprietary, open source, and other third party components from a wide variety of public and proprietary sources. Assembling software from existing components is faster and more efficient than custom coding every feature. However, the flow of components into and through an organization creates a complex software supply chain that can negatively impact speed, efficiency and quality if not properly managed.

The Nexus Repository serves as the universal local warehouse to efficiently manage and distribute component parts, assemblies & finished goods across your software supply chain. The Nexus Repository supports popular component formats, including Java/Maven, npm, NuGet, RubyGems, Docker, P2, OBR, APT and RPM. Furthermore, the Nexus Repository has built-in software supply chain intelligence to help you avoid security vulnerabilities and restrictive licenses which lead to break-fixes, unplanned work and unnecessary risk.

With over 80% market share, the Nexus Repository is the "go-to" solution for organizations seeking to accelerate software development for Agile, DevOps, continuous delivery or for competitive differentiation.

KEY BENEFITS

Faster and more reliable builds

Locally caching and hosting components eliminates the need to download them repeatedly, saving time and eliminating the impact of remote service failures. The Nexus Repository stores everything required to deploy or recreate an application's binaries and the environments in which they run in one stable, reliable and easily accessed location. This allows your development team to reduce build cycle times, operations teams to accelerate rollouts and rollbacks, and security and audit teams to streamline audit processes.

Users of Nexus report that their build tools and other development tooling perform up to 20x faster than those pulling components from public repositories.

Improve collaboration

Keep all development locations in sync by providing rapid availability of components to each Nexus instance, ensuring overall build stability and performance across geographically distributed environments.

Reduce unplanned work and maintenance

The Nexus Repository provides complete visibility into what components have been downloaded from public repositories and image registries, including accurate, upto-date information about component licenses, known security vulnerabilities, versions, popularity and more. This supply chain intelligence is available in the component search functionality to help developers choose the best component parts from the start. By standardizing on preferred components and versions, you'll boost developer efficiency by reducing your code base and simplifying maintenance. Furthermore, you improve quality and avoid unplanned work. The Repository Health Check allows administrators to use this same software supply chain intelligence to produce a report of known security or license issues for components in your repository. This visibility enables you to clean your warehouse and provide developers with the supply chain parts that meet your organizations' guidelines.

"Nexus is super easy to set up and update. You'll waste time trying to find another way to manage your binaries.

Development of Nexus is very active, the support is awesome and all the features you'd need are there."

Alexis Morelle,

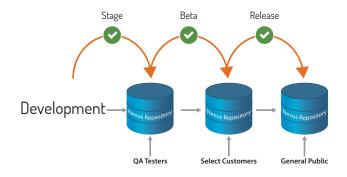
"It is impossible to do serious development without a repository manager. And the only one on the market that is serious is Nexus."

> Arnaud Heritier, Software Factory Manager, eXo

to public repositories and registries, and LDAP support. The use of user-based tokens avoids having to supply plain-text credentials to the tools accessing Nexus.

Component deployment for continuous delivery

Software development teams can post a collection of related components to the repository manager that can be tested, promoted, or discarded as a unit. The "staging" support improved releases to production systems, including build sign-offs or re-deploying new builds for testing prior to final release. Automated validation of release components ensures quality and notifications sent during the process keep everyone informed.



Keep everything required to create your application's binaries and the environments in which they run in a deterministic, stable location.

Enhance security

The Nexus Repository brings additional levels of security to development operations including support for single sign-on, role-based access controls, secure connections

Software Factory Architect, Alcatel-Lucent

THE NEXUS DIFFERENCE

Only the Nexus Repository features built-in, constantly updated supply chain intelligence about the component parts that developers build into your software. Your organization can build better software and avoid unplanned work and break-fixes by choosing the better, safer component from the start.

1. Repository Health Check

Automatically see what's in your repository. Clear out components that don't meet your policies.

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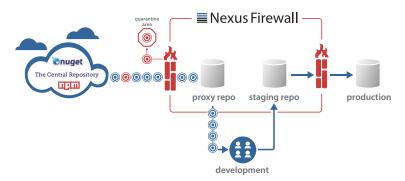
2 Built-In Component Search Panel

Enable developers to quickly assess the quality and safety of any component before it is used.

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3 Optional Nexus Firewall

Automate the process of keeping undesirable components from entering and leaving your Nexus Repository.



NEXUS FIREWALL: PERIMETER DEFENSE FOR YOUR REPOSITORY

Our Nexus Firewall solution provides an innovative solution to block undesirable compo-nents from getting into your software at the earliest possible point: the repository manager where developers source components.

Now you can automate otherwise manual, human reviews and 'golden repository' strategies in order to keep pace with the speed of today's development practices. With Nexus Firewall you can shield your application development from waste and risk by automatically and continuously blocking these unacceptable software components inbound and preventing release of applications containing such components outbound.

Nexus Firewall goes beyond blocking, providing organizations with the visibility and data needed to make ideal decisions for open source component selection early, significantly reducing risk, unplanned work and technical and security debt.

FEATURE COMPARISON					
Feature	Nexus Repository OSS	Nexus Repository	Description		
Storage and Retrieval of Binary Artifacts	Х	Х	Easily store and retrieve binary artifacts to speed development efforts.		
Deployment of Custom Binaries	Х	Х	Custom binary support enables management of internal development efforts in the same repositories as externally sourced components.		
Integration with Leading Continuous Delivery Tools	Х	Х	Nexus offers a number of formal and community supported integrations and plug-ins (e.g., Puppet, Chef, Docker, RunDeck, Jenkins).		
Unlimited Server Deployments	Х	Х	Scale your organization and deployment onto as many servers and datacenters as you like without worrying about licensing and additional fees.		
Publish/Subscribe Notification for Deployments		Х	Smart Proxy enables immediate deployment notification to downstream Nexus servers allowing efficient distribution to many Nexus instances. Get the components to where they are needed as fast as possible.		
Technical Support		Х	Live tech support with guaranteed service level agreements to help with configurations, upgrades, and more.		
Authentication and Access Control	Basic	Advanced	Basic support includes LDAP and fine-grained access control. Advanced includes Enterprise LDAP and Crowd support, as well as SSL certificate management and user token support.		
Secure Delivery		Х	SSL secures the delivery channel from the Central Repository helping to eliminate man-in-the-middle attacks.		
Comprehensive Repo and Build Tool Support	Х	Х	Robust build and repo support (Maven, Ant/Ivy, Gradle) extends value of Nexus.		
Hosted and Group Repositories	Х	Х	Single virtual location for sharing and publishing artifacts speeds development.		
Built-in, Regularly Updated Component Search Panel	Basic	Advanced	Basic search facilitates component identification and selection. Nexus supports searches for keywords, classnames, checksums, and custom metadata. Advanced search uses regularly updated software supply chain intelligence to provide detailed information about component popularity, the latest versions, known security vulnerabilities and restrictive licenses.		
Automated Repository Health Checks	Basic	Advanced	Identify and assess the components in your repository. Advanced health checks provide reporting on all known component versions, age, popularity, licenses, and security vulnerabilities. Basic health checks provide a summary of risks, but not down to the individual component details.		
Universal Repository for Multiple Component Types & Formats	Х	Х	Nexus instances are repository format neutral and include support for Java/Maven, npm, NuGet, RubyGems, Docker, P2, OBR, APT and RPM.		

Visit us online at <u>www.sonatype.com/nexus/try-compare-buy/compare</u> for more detailed features and comparisons.

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Visit the Nexus Community at www.sonatype.org/nexus to see real-world examples of Nexus in customer ecosystems.

THE ROLE OF NEXUS REPOSITORY IN THE CONTINUOUS ECOSYSTEM

- **Continuous integration**—Improve CI build performance. Nexus is the source of components and images used by the various builds running on the CI server and also the destination for build outputs.
- Release automation—Optimize distribution. As in continuous integration environments, Nexus is the source of the components that are being delivered to the various environments and it is the repository of record for the deployment components, including EAR and WAR files, VM images, Docker images, scripts and more.
- Public repositories—Cache locally. Nexus is the proxy between development and operations teams and the Internet based repositories and registries. It reduces the bandwidth required since each compo-

nent has to be downloaded only once, rather than multiple times. This also increases the stability of the internal tool setup since it reduces the dependence on these external repositories. It also increases speed due to avoided downloads and faster onpremises access.

- **IDE**—Nexus provides the components and their metadata in the IDE so developers can make the right choices without interrupting their work.
- Build tools—Access components from Nexus via downloads as well as publish them to Nexus via uploads/deployments. Build tools also act as automation for numerous other steps that are potentially related to Nexus and often executed on the CI server and the developer's computers.



Join TheNEXUS Community

- Early access to new releases
- Free downloads
- Free training
- Free books
- Video series
- And other useful resources

www.sonatype.org/nexus

GET STARTED TODAY

Join the TheNexus community project to learn, engage, and share Nexus tips and trick with peers and experts worldwide. Check out the fresh new articles and Nexus Live video chats with our development team. Try your hand at a Nexus two-minute challenge video, enhance your skills with free video training, and peruse the latest Nexus Now newsletters. Find the community at www. sonatype.org.

Free Downloads

For a 14-day free trial of Nexus Repository, please visit www.sonatype.com/nexus/free-trial. No credit card is required. Just download and go!

To download Nexus Repository OSS, please go to www. sonatype.org/nexus/go

Sonatype helps organizations build better software, even faster. Like a traditional supply chain, software applications are built by assembling open source and third party components streaming in from a wide variety of public and internal sources. While re-use is far faster than custom code, the flow of components into and through an organization remains complex and inefficient. Sonatype's Nexus solutions apply proven supply chain principles to increase speed, efficiency and quality by optimizing the component supply chain. Sonatype has been on the forefront of creating tools to improve developer efficiency and quality since the inception of the Central Repository and Apache Maven in 2001, and the company continues to serve as the steward of the Central Repository serving 17.2 Billion component download requests in 2014 alone. Sonatype is privately held with investments from New Enterprise Associates (NEA), Accel Partners, Bay Partners, Hummer Winblad Venture Partners and Morgenthaler Ventures. Visit: www.sonatype.com

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