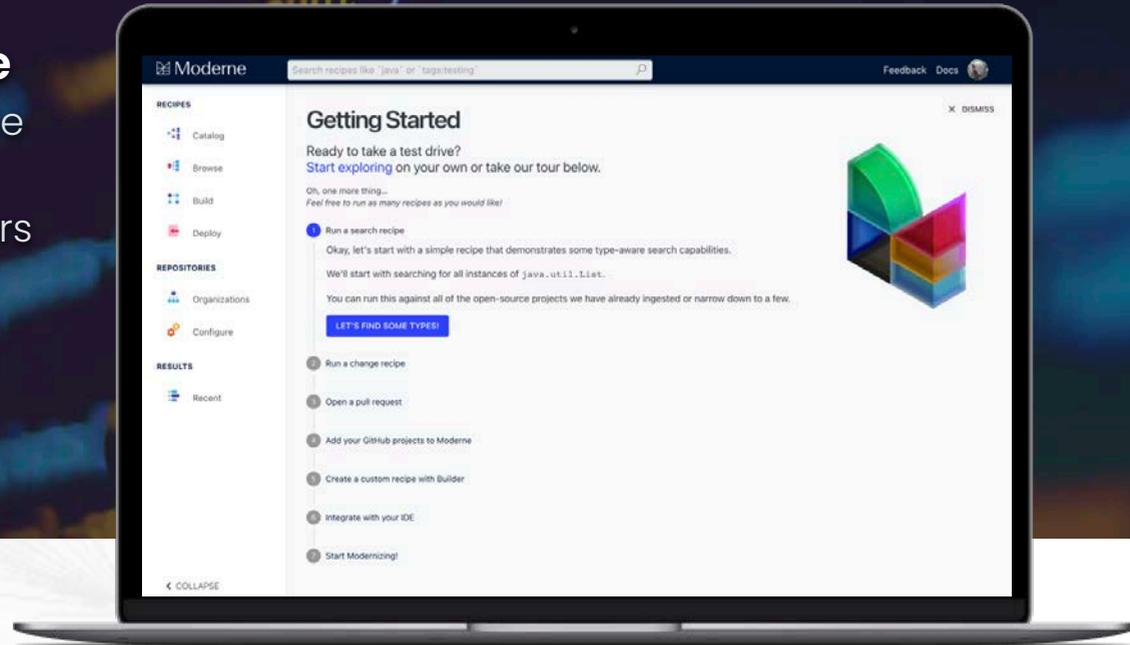


Moderne

Automated software maintenance

Moderne offers framework migrations, code analysis with remediation, and unrivaled code transformation at scale, so developers can spend their time building new things instead of maintaining the old.



Sustainable approach to development

Growth in software volume makes automation essential. Moderne automates and speeds up software repair. Quickly fix bugs and CVEs, understand and update open source dependencies, eliminate technical debt and modernize applications through expert-crafted automation in minutes, not months.

Modern software is composed, not written from scratch. It's more than 80% OSS and third-party libraries. As components change to improve their APIs or fix vulnerabilities, developers need to restitch new versions into their business applications. Effectively managing your software supply chain means wrangling the CODE, not just libraries.

Moderne enables organization-wide understanding of what is in your codebase, what dependencies you use, and allows developers to collaborate, analyze, and automate code fixes to accomplish improvements and modernization.

"...recognizing the challenges with and need for ongoing maintenance of increasingly large and diversely composed codebases and ecosystems. The "shift left" movement in AppSec over the last decade has been additive and transformative but has been more heavily focused on solutions to find issues in newly created software. **We need similar innovations to help drive change and improvements in existing code and systems.**"
[Jason Chan, VP Security at Netflix \(Retired\)](#)

Stay on top of addressing CVEs

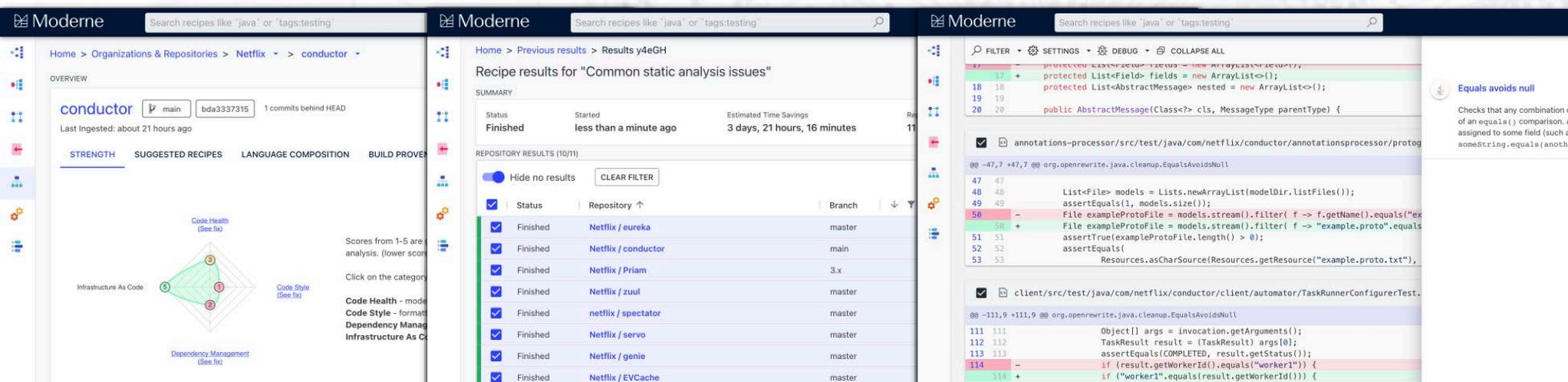
- Understand your codebase, so when a new vulnerability is discovered, you can **quickly iterate** over your applications and **distribute an automated fix**.

Save time

- Time savings from applying this automation are extreme.
- Software maintenance takes at least 30% of engineering time.
- One testing framework **upgrade was in progress for 18 months**, with automation done in minutes.

Unlock enterprise productivity

- Allow your developers to **innovate and build new applications** and features rather than take care of tedious work.
- Improve **developer morale** and retention.



In-depth language support

- Built on type-attributed, format-preserving Abstract Syntax Tree plus a set of essential recipes for code search and transformation. Results in 100% accurate, style preserving code transformations and searches with no false positives.
- Curate and recommend recipes for OSS dependency insights, upgrades, and CVE patching.
- Framework for building automation recipes for custom searches and transformations.

Automated code fixes integrated with GitHub and Bitbucket

- Allow developers to run automation recipes to fix issues and commit or create pull requests to source code in GitHub or Bitbucket.
- Code fixes are initiated by developers and co-authored with Moderne SaaS for traceability then put through a regular review and SDLC processes before release.
- Change campaigns to analyze and fix code en-masse.

Recommendation service for each repository

- Pre-analyze each repository and surface insights and applicable fixes.
- Code and library-level software composition analysis (SCA). Help developers understand who's using their APIs, what third-party APIs they are using, which databases they interact with, etc.
- When a CVE is disclosed and a new recipe is developed to fix it, it automatically surfaces the recipe to each applicable repository.

Recipe management

- Recipe builder - quickly assemble complex recipes for common code fixes (change method, arguments, package).
- Manage OSS or custom recipes as packages uploaded to the service.
- Recipe catalog - automatically add new recipes to the catalog as they are uploaded or created through the recipe builder. Distribute recipes across organizations.

Integration with developer workflows

- Build plugin integration allows for local usage and to publish ASTs out of the build independently of the CI systems used. ASTs are available in SaaS within minutes.
- IDE integration for searches. Find who's using your API or how to use a specific API in seconds.
- Align users' source code access to SCM permissions. No other configuration is necessary.
- Moderne API for custom integrations.

Technology and language support



Enterprise deployment

- Single-tenant SaaS in the cloud provider and region of your choice
- Integration with your SSO
- On-prem agent (egress only connection to SaaS)
- Bring your own encryption key controlled by the on-prem agent. All data is encrypted as it is transmitted. Taking the agent down is a single point of control you exercise to make the data ciphertext.
- Audit log and traceability
- Build plugin integration with Artifactory for use with any CI/CD system

 **Moderne**

Start today:
<https://app.moderne.io>

More information:
<https://moderne.io>