

Open Source Software (OSS) Risk Scoring by OpsMx

Problem Statement

Organizations rely on open-source software as libraries, code components and sometimes even as standalone platforms to innovate faster and cut costs. While OSS offers significant benefits, integrating it into enterprise environments introduces challenges. Without proper risk assessment, teams may face:

A Operational Risks

Issues with quality, functionality, supportability, scalability, and longevity due to variable quality assurance and decentralized development practices.

Security Risks

Vulnerabilities from known issues (CVEs), delayed fixes, and targeted attacks exploiting publicly available information.

License Risks

Compliance challenges from diverse licenses (e.g., GPL vs. MIT), leading to legal implications and policy enforcement difficulties.

OSS Risk Assessment Capabilities

OpsMx uniquely offers comprehensive risk scoring by assessing all aspects of operational, security, and licensing risks:

Operational Risk Assessment:

- **Community Support:** Active contributors and frequent commits indicate better maintenance and longevity.
- Maintenance Activity: Recent releases and consistent updates show ongoing improvements.
- Quality Assurance: Evaluating testing practices and release processes ensures reliability.

Security Risk Assessment:

- **Historical Vulnerabilities:** Analyzing past security issues and Mean Time to Repair (MTTR) informs risk levels.
- Exploit Likelihood: Assessing the probability of exploitation and potential impact scope.
- Dark Web Monitoring: Detecting chatter indicating potential threats.

License Risk Assessment:

- License Type: Identifying legal risks associated with different licenses.
- Policy Compliance: Verifying alignment with organizational policies and compliance requirements.

OSS Risk Management Workflow

Beyond risk scoring, OpsMx provides a closed-loop solution for comprehensive OSS risk management:

AllowList/DenyList Rules: Analyze risk scores and recommendations at the outset to ensure alignment with technical needs and business goals. Integrate into the build process or pre-approve and reject libraries as whitelisted or blacklisted rulesets for correct choices from the start.

Remediation Recommendations: OpsMx offers insights on:

- Alternative Solutions: Suggesting other OSS or commercial software options.
- Vendor Support: Information on vendors offering premium support services.
- Managed Services: Vendors providing cloud hosting or managed services.

Policy Enforcement and Compliance: Define acceptable risk levels and licensing policies with OpsMx's policy engine, enabling automatic enforcement through integrated assessments in CI/CD pipelines.

Continuous Monitoring: Post-deployment, OpsMx reassesses OSS components as new risks emerge, updating policies to adapt to changes in the OSS landscape.



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Impact

By utilizing OpsMx's OSS Risk Scoring tool, organizations can:



Conclusion

Selecting the right open-source libraries is critical for software success. **OpsMx's OSS Risk Scoring tool** empowers teams to assess and manage operational, security, and license risks proactively. By integrating this tool into development processes, organizations can make smarter decisions, mitigate issues before they arise, and focus on delivering value without unexpected disruptions.

ABOUT US

OpsMx secures and intelligently automates software delivery from developer to deployment, building on an Open Software Delivery architecture and AI/ML-powered DevSecOps. OpsMx products and services enable hundreds of thousands of developers at Google, Cisco, Western Union, and other leading global enterprises to ship better software faster.

FOR MORE INFORMATION, CONTACT US:

OPSMX, INC | 350 OAKMEAD PKWY, SUNNYVALE, CA 94085 | <u>INFO@OPSMX.COM</u> <u>WWW.OPSMX.COM/SECURE SOFTWARE DELIVERY</u>