New Architecture Brings New Security Challenges

Containerized applications have become the de facto method for delivering code faster and more reliably. Now, security and policy solutions must extend to secure inter-service APIs with the same priority as externally-facing APIs, or enterprises risk exposing data to lateral movement and potential exfiltration.

Custom Authorization Logic Cannot Scale

Authorization and access policy is typically only checked at an ingress API gateway, with all internal communication given too much trust. More forward thinking teams may have brought authorization logic in to the services, but policy is typically siloed, written in different languages and built from custom-coded, bespoke logic.

Authorization Must Move to the Service Layer

Styra's Declarative Authorization Service works with microservice APIs to provide distributed security policy, with a centralized control plane. Styra lets you incorporate dynamic context from authentication tokens, the data being requested, the APIs making requests, and much more to enforce flexible policy without custom code.

Styra lets you easily create policies to control:

- Which services can can and cannot communicate with production.
- Where apps can send data, under which circumstances.
- Lateral movement of data from from compromised servers.

Styra DAS evaluates real-time context against custom authorization policy to tightly control microservice interaction, minimizing risk and maximizing performance.

Built on the open-source Open Policy Agent, and declarative by design, Styra authorization policy is proven at scale, across verticals, to tightly control communication to, from and between microservices.
# The Benefits of Declarative Authorization for Kubernetes Security

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<th>Benefit</th>
<th>Description</th>
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| **Consolidated**                     | Eliminate the need to build logic into services directly, or maintain maintain multiple policy silos                                                                                                       | **Consistent, unified authorization logic across services**  
Styra DAS lets teams remove custom logic from the app so developers can focus on more critical, differentiated features. Services don’t need to maintain awareness of requests, or contain logic for evaluating access rules. **Free developers and ease maintainability with decoupled policy.** |
| **Context-aware**                    | Evaluate dynamic business context for real-time decisions, without performance impact                                                                                                                     | **Verify before enforcement**  
Styra allows you to pre-run policies to see their impact before deployment. Compare changes against historical data, to see what would have been different if the updates had been made. Put rules into monitor-only mode to see where violations occur. **Gain insight and deploy more confidently, with less risk.** |
| **Secure**                           | Protect against lateral movement attacks, or hot-patch policies to isolate unusual activity                                                                                                                   | **Manage and distribute policy at scale**  
Styra manages authorization policy across services and proxies with a single management and control plane. Policies are enforced locally, and updated centrally, for comprehensive compliance and security. **Ensure authorization policy is enforced across services, without custom policy logic.** |
| **Flexible**                         | Improve performance with central or distributed policy evaluation as needed                                                                                                                                      | **Customizable, context-aware policies**  
Hard-coded rules can’t handle context changes as requirements evolve. Styra lets DevOps and Development teams incorporate context from authentication tokens, the data being requested, the APIs making requests, and more to meet business requirements, and end brittleness. **Future-proof your policy.** |
| **Trusted**                          | Built by the founders of the Open Policy Agent project, hosted by the CNCF                                                                                                                                       | **Trusted in the largest cloud-native deployments**  
Styra is built on the Open Policy Agent—a popular and widely deployed open source project founded by the same team that built Styra. With primary credibility for the underlying technology, the Styra team and technology are both proven in production across verticals. **Get best of breed technology, proven at scale.** |

Styra enables enterprises to define, enforce and monitor policy across their cloud-native environments. With a combination of open source (Open Policy Agent) and commercial solutions (Declarative Authorization Service), Styra provides security, operations and compliance guardrails to protect applications, as well as the infrastructure they run on.

Styra policy-as-code solutions lets developers, DevOps and security teams mitigate risks, reduce human error and accelerate application development.

For more information visit styra.com, or follow @StyraInc on Twitter