

# Styra Load: Enterprise-grade Authorization Engine for Data-heavy Workloads

## Authorization Needs Policy as Code

As enterprises embrace cloud-native applications and infrastructure, they're selecting a policy-as-code approach to authorization to enforce security and compliance best practices and implement fine-grained access controls. Open Policy Agent (OPA) has emerged as the de facto standard to implement policy-as-code authorization across the cloud-native stack: from securing Kubernetes, to validating Terraform resource changes, to enforcing fine-grained controls across API gateways, microservices and service mesh.

## Fine-grained Authorization Needs Data

To deliver richer, more contextual authorization decisions, OPA needs data. Fine-grained authorization controls need ever-more data about users, attributes, resources, and context. Moving from Role-Based Access Control (RBAC) to Attribute-Based Access Control (ABAC) means breaking apart your few roles and permissions into the myriad attributes that are more accurate representations of your authorization logic.

## More Data Can Be Problematic

While managing OPA at scale, platform engineering teams struggle as their data sets grow. The gravity of data tends to cause OPA architectures to evolve into fewer and larger instances of OPA vs many distributed OPAs that live close to the data. The result is an increase in the cost of infrastructure, causing platform engineers to build alternative solutions to

reduce the large overhead costs of keeping large datasets in memory. Platform engineers deserve a reliable way to mitigate the effects of data gravity on externalized authorization without having to invest in building complex workarounds.

## Introducing, Styra Load

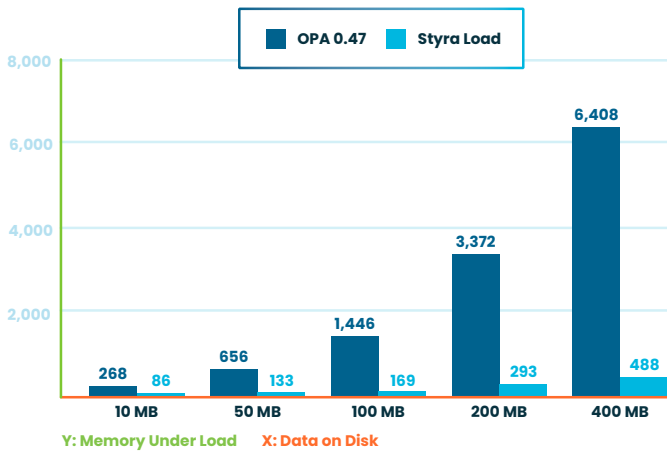
- Smaller footprint, more efficient infrastructure (10x less memory, 40% less CPU).
- Native datasource integrations, without the need for custom workarounds.
- Reduce risk with live policy impact analysis.

Styra Load is the only enterprise-grade authorization engine built to provide resource-efficient performance for data-heavy workloads while connecting natively to your existing data sources.

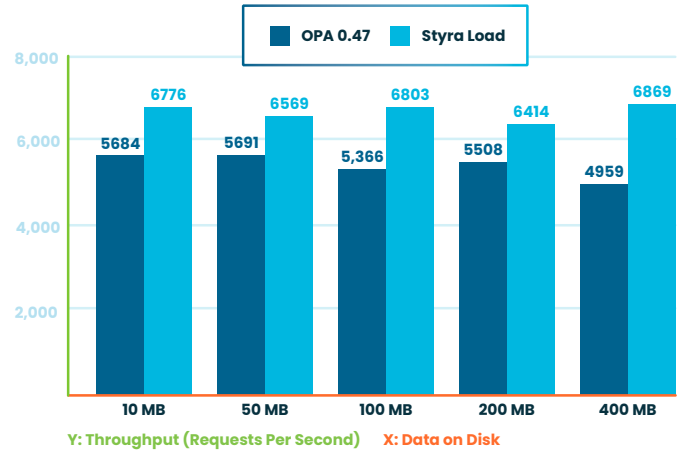
Styra Load provides the same power of OPA with 10x less memory and 40% better CPU throughput. Because Styra Load is a backwards-compatible OPA distribution, Styra Load can be swapped in quickly with little-to-no configuration changes.

Styra Load can reduce the time it takes to get authorization engine into production with its out-of-the-box datasource integrations, including Kafka.

Styra Load allows teams to mitigate risk with powerful analytical tools. With Styra Load's live impact analysis feature, new policy code can be run against the same decisions that are running in production — any production impacting changes can be caught before the policy code goes live.



Memory Footprint (32 Clients): Styra Load uses 10x less memory



CPU Throughput (32 Clients): Styra Load Supports 40% more.

## The Benefits of Styra Load for Data-Heavy Authorization

<p><b>Reduce costs of data-heavy authorization.</b></p>	<p>Styra Load allows you to reduce OPA’s memory overhead by 10x and gain the ability to get 40% more CPU throughput at the policy decision point. Styra Load gives you the ability to use smaller EC2 instances to serve the same policy workload.</p>
<p><b>Improved authorization performance and set-up.</b></p>	<p>Using Styra Load out-of-the-box datasource integrations allows teams to reduce development costs and get into production quickly.</p> <p>Datasource integrations will include:</p> <ul style="list-style-type: none"> <li>• Kafka</li> <li>• S3</li> <li>• HTTP</li> <li>• GCS</li> <li>• Okta</li> <li>• LDAP</li> <li>• Git</li> </ul>
<p><b>Minimize risk with powerful analysis.</b></p>	<p>Extending the industry’s only impact analysis tool, Styra Load minimizes risk by comparing new policies against live production decisions. Any discrepancies between old and new policies are caught before the change goes live.</p>

## About Styra

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 products (Styra DAS, Styra Load and Styra Run), Styra provides policy-as-code authorization, enabling security, operations and compliance to protect applications and infrastructure. [Learn more at www.styra.com](https://www.styra.com)

