What is Istio



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What is Istio

• Service Mesh, Why do we need a Service Mesh?

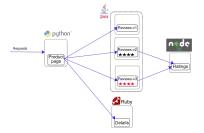
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What is Istio

- Service Mesh, Why do we need a Service Mesh?
- Let's take an example

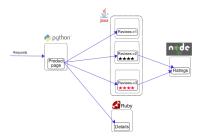




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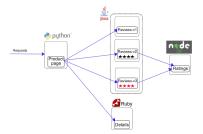
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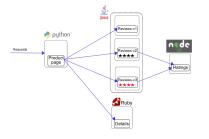
Secure with mTLS



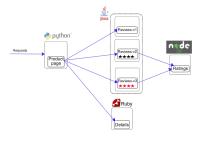
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- Secure with mTLS
- Connect

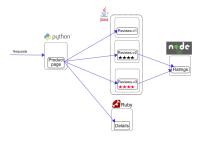




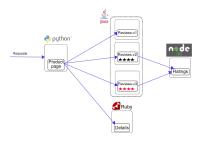
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- Service discovery, traffic management, test/canary versioning, incremental rollouts



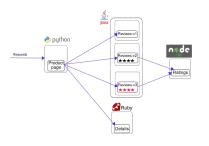
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- Retry policies, Circuit breaker



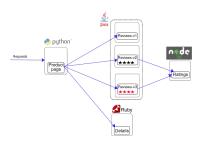
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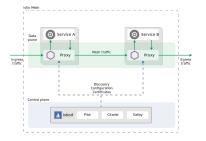
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- See where the bottlenecks are, how traffic flows



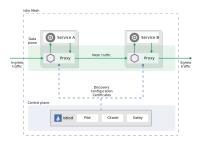
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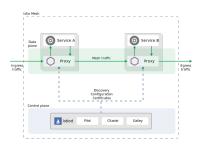
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- Control
- Like who's allowed to talk to who, Rouge containers cannot talk to a service



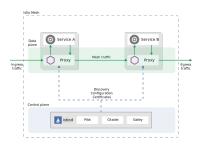
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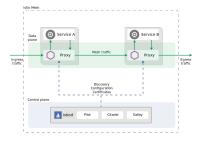
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- It runs next to your containers in the same kuberneted pod

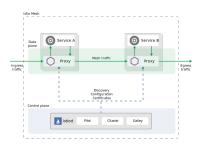


- Injected envoy proxies to each containers in the system
- It runs next to your containers in the same kuberneted pod
- Intercepts all requests and responses, apply any policies defined



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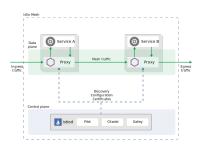
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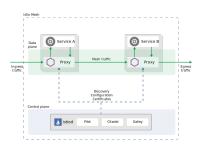
Galley

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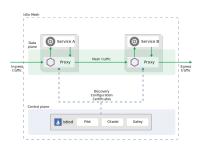
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- Galley
- Pilot

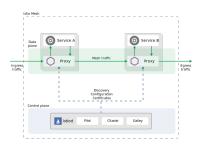


- Galley
- Pilot
- Policy



- Galley
- Pilot
- Policy
- Telemetry

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- Galley
- Pilot
- Policy
- Telemetry
- Citadel



Gateway



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- Gateway
- Virtual Service





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- VS can be from Gateway to a service
- VS can be from service to another service



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- VS is where u define the percentile trafic split for different versions
- DestinationRules
- For applying rules like Circuit breaker/retry/etc

• Let's do a demo

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