
networking.istio.io

[destinationrules](#)

[gateways](#)

[sidecars](#)

[virtualservices](#)

Type

object

Specification

Property	Type	Description
<code>spec</code>	object	Configuration affecting load balancing, outlier detection, etc. See more details at: https://istio.io/docs/reference/config/networking/destination-rule.html ↗
<code>status</code>	object	

.spec

Description

Configuration affecting load balancing, outlier detection, etc. See more details at: <https://istio.io/docs/reference/config/networking/destination-rule.html>

Type

object

Property	Type	Description
<code>exportTo</code>	<code>array</code>	A list of namespaces to which this destination rule is exported.
<code>host</code>	<code>string</code>	The name of a service from the service registry.
<code>subsets</code>	<code>array</code>	
<code>trafficPolicy</code>	<code>object</code>	
<code>workloadSelector</code>	<code>object</code>	

.spec.exportTo

Description

A list of namespaces to which this destination rule is exported.

Type

`array`

.spec.exportTo[]

Type

`string`

.spec.subsets

Type

`array`

.spec.subsets[]

Type

object

Property	Type	Description
labels	object	
name	string	Name of the subset.
trafficPolicy	object	Traffic policies that apply to this subset.

.spec.subsets[].labels**Type**

object

.spec.subsets[].trafficPolicy**Description**

Traffic policies that apply to this subset.

Type

object

Property	Type	Description
connectionPool	object	
loadBalancer	object	Settings controlling the load balancer algorithms.
outlierDetection	object	

Property	Type	Description
<code>portLevelSettings</code>	array	Traffic policies specific to individual ports.
<code>tls</code>	object	TLS related settings for connections to the upstream service.
<code>tunnel</code>	object	

`.spec.subsets[].trafficPolicy.connectionPool`

Type

object

Property	Type	Description
<code>http</code>	object	HTTP connection pool settings.
<code>tcp</code>	object	Settings common to both HTTP and TCP upstream connections.

`.spec.subsets[].trafficPolicy.connectionPool.http`

Description

HTTP connection pool settings.

Type

object

Property	Type	Description
<code>h2UpgradePolicy</code>	<code>string</code>	Specify if http1.1 connection should be upgraded to http2 for the associated destination.
<code>http1MaxPendingRequests</code>	<code>integer</code>	
<code>http2MaxRequests</code>	<code>integer</code>	Maximum number of active requests to a destination.
<code>idleTimeout</code>	<code>string</code>	The idle timeout for upstream connection pool connections.
<code>maxRequestsPerConnection</code>	<code>integer</code>	Maximum number of requests per connection to a backend.
<code>maxRetries</code>	<code>integer</code>	
<code>useClientProtocol</code>	<code>boolean</code>	If set to true, client protocol will be preserved while initiating connection to backend.

`.spec.subsets[].trafficPolicy.connectionPool.tcp`

Description

Settings common to both HTTP and TCP upstream connections.

Type

`object`

Property	Type	Description
<code>connectTimeout</code>	<code>string</code>	TCP connection timeout.
<code>maxConnectionDuration</code>	<code>string</code>	The maximum duration of a connection.
<code>maxConnections</code>	<code>integer</code>	Maximum number of HTTP1 /TCP connections to a destination host.
<code>tcpKeepalive</code>	<code>object</code>	If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

`.spec.subsets[].trafficPolicy.connectionPool.tcp.tcpKeepalive`

Description

If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

Type

`object`

Property	Type	Description
<code>interval</code>	<code>string</code>	The time duration between keep-alive probes.
<code>probes</code>	<code>integer</code>	
<code>time</code>	<code>string</code>	

`.spec.subsets[].trafficPolicy.loadBalancer`

Description

Settings controlling the load balancer algorithms.

Type

object

Property	Type	Description
<code>consistentHash</code>	object	
<code>localityLbSetting</code>	object	
<code>simple</code>	string	
<code>warmupDurationSecs</code>	string	Represents the warmup duration of Service.

`.spec.subsets[].trafficPolicy.loadBalancer.consistentHash`

Type

object

Property	Type	Description
<code>httpCookie</code>	object	Hash based on HTTP cookie.
<code>httpHeaderName</code>	string	Hash based on a specific HTTP header.
<code>httpQueryParameterName</code>	string	Hash based on a specific HTTP query parameter.

Property	Type	Description
<code>maglev</code>	<code>object</code>	The Maglev load balancer implements consistent hashing to backend hosts.
<code>minimumRingSize</code>	<code>integer</code>	Deprecated.
<code>ringHash</code>	<code>object</code>	The ring/modulo hash load balancer implements consistent hashing to backend hosts.
<code>useSourceIp</code>	<code>boolean</code>	Hash based on the source IP address.

`.spec.subsets[].trafficPolicy.loadBalancer.consistentHash.httpCookie`

Description

Hash based on HTTP cookie.

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Name of the cookie.
<code>path</code>	<code>string</code>	Path to set for the cookie.

Property	Type	Description
<code>tTL</code>	<code>string</code>	Lifetime of the cookie.

`.spec.subsets[].trafficPolicy.loadBalancer.consistentHash.maglev`

Description

The Maglev load balancer implements consistent hashing to backend hosts.

Type

`object`

Property	Type	Description
<code>tableSize</code>	<code>integer</code>	The table size for Maglev hashing.

`.spec.subsets[].trafficPolicy.loadBalancer.consistentHash.ringHash`

Description

The ring/modulo hash load balancer implements consistent hashing to backend hosts.

Type

`object`

Property	Type	Description
<code>minimumRingSize</code>	<code>integer</code>	

.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting

Type

object

Property	Type	Description
<code>distribute</code>	array	Optional: only one of distribute, failover or failoverPriority can be set.
<code>enabled</code>	boolean	enable locality load balancing, this is DestinationRule-level and will override mesh wide settings in entirety.
<code>failover</code>	array	Optional: only one of distribute, failover or failoverPriority can be set.
<code>failoverPriority</code>	array	failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.distribute

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

array

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.distribute[]`

Type

object

Property	Type	Description
<code>from</code>	string	Originating locality, '/' separated, e.g.
<code>to</code>	object	Map of upstream localities to traffic distribution weights.

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.distribute[].to`

Description

Map of upstream localities to traffic distribution weights.

Type

object

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.failover`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

array

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.failover[]`

Type

object

Property	Type	Description
<code>from</code>	string	Originating region.
<code>to</code>	string	

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.failoverPriority`

Description

failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

Type

array

`.spec.subsets[].trafficPolicy.loadBalancer.localityLbSetting.failoverPriority[]`

Type

string

`.spec.subsets[].trafficPolicy.outlierDetection`

Type

object

Property	Type	Description
<code>baseEjectionTime</code>	<code>string</code>	Minimum ejection duration.
<code>consecutive5xxErrors</code>	<code>integer</code>	Number of 5xx errors before a host is ejected from the connection pool.
<code>consecutiveErrors</code>	<code>integer</code>	
<code>consecutiveGatewayErrors</code>	<code>integer</code>	Number of gateway errors before a host is ejected from the connection pool.
<code>consecutiveLocalOriginFailures</code>	<code>integer</code>	
<code>interval</code>	<code>string</code>	Time interval between ejection sweep analysis.
<code>maxEjectionPercent</code>	<code>integer</code>	
<code>minHealthPercent</code>	<code>integer</code>	
<code>splitExternalLocalOriginErrors</code>	<code>boolean</code>	Determines whether to distinguish local origin failures from external errors.

`.spec.subsets[].trafficPolicy.portLevelSettings`

Description

Traffic policies specific to individual ports.

Type

array

.spec.subsets[].trafficPolicy.portLevelSettings[]**Type**

object

Property	Type	Description
connectionPool	object	
loadBalancer	object	Settings controlling the load balancer algorithms.
outlierDetection	object	
port	object	
tls	object	TLS related settings for connections to the upstream service.

.spec.subsets[].trafficPolicy.portLevelSettings[].connectionPool**Type**

object

Property	Type	Description
http	object	HTTP connection pool settings.

Property	Type	Description
<code>tcp</code>	<code>object</code>	Settings common to both HTTP and TCP upstream connections.

`.spec.subsets[].trafficPolicy.portLevelSettings[].connectionPool.http`

Description

HTTP connection pool settings.

Type

`object`

Property	Type	Description
<code>h2UpgradePolicy</code>	<code>string</code>	Specify if http1.1 connection should be upgraded to http2 for the associated destination.
<code>http1MaxPendingRequests</code>	<code>integer</code>	
<code>http2MaxRequests</code>	<code>integer</code>	Maximum number of active requests to a destination.
<code>idleTimeout</code>	<code>string</code>	The idle timeout for upstream connection pool connections.
<code>maxRequestsPerConnection</code>	<code>integer</code>	Maximum number of requests per connection to a backend.

Property	Type	Description
<code>maxRetries</code>	<code>integer</code>	
<code>useClientProtocol</code>	<code>boolean</code>	If set to true, client protocol will be preserved while initiating connection to backend.

`.spec.subsets[].trafficPolicy.portLevelSettings[].connectionPool.tcp`

Description

Settings common to both HTTP and TCP upstream connections.

Type

`object`

Property	Type	Description
<code>connectTimeout</code>	<code>string</code>	TCP connection timeout.
<code>maxConnectionDuration</code>	<code>string</code>	The maximum duration of a connection.
<code>maxConnections</code>	<code>integer</code>	Maximum number of HTTP1 /TCP connections to a destination host.
<code>tcpKeepalive</code>	<code>object</code>	If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

`.spec.subsets[].trafficPolicy.portLevelSettings[].connectionPool.tcp.tcpKeepalive`

Description

If set then set `SO_KEEPALIVE` on the socket to enable TCP Keepalives.

Type

object

Property	Type	Description
<code>interval</code>	<code>string</code>	The time duration between keep-alive probes.
<code>probes</code>	<code>integer</code>	
<code>time</code>	<code>string</code>	

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer`

Description

Settings controlling the load balancer algorithms.

Type

object

Property	Type	Description
<code>consistentHash</code>	<code>object</code>	
<code>localityLbSetting</code>	<code>object</code>	
<code>simple</code>	<code>string</code>	

Property	Type	Description
warmupDurationSecs	string	Represents the warmup duration of Service.

.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.consistentHash

Type

object

Property	Type	Description
httpCookie	object	Hash based on HTTP cookie.
httpHeaderName	string	Hash based on a specific HTTP header.
httpQueryParameterName	string	Hash based on a specific HTTP query parameter.
maglev	object	The Maglev load balancer implements consistent hashing to backend hosts.
minimumRingSize	integer	Deprecated.
ringHash	object	The ring/modulo hash load balancer implements consistent hashing to backend

Property	Type	Description
		hosts.
<code>useSourceIp</code>	<code>boolean</code>	Hash based on the source IP address.

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.httpCookie`

Description

Hash based on HTTP cookie.

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Name of the cookie.
<code>path</code>	<code>string</code>	Path to set for the cookie.
<code>tTL</code>	<code>string</code>	Lifetime of the cookie.

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.maglev`

Description

The Maglev load balancer implements consistent hashing to backend hosts.

Type

object

Property	Type	Description
tableSize	integer	The table size for Maglev hashing.

.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.ringHash**Description**

The ring/modulo hash load balancer implements consistent hashing to backend hosts.

Type

object

Property	Type	Description
minimumRingSize	integer	

.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting**Type**

object

Property	Type	Description
distribute	array	Optional: only one of distribute, failover or failoverPriority can be set.

Property	Type	Description
<code>enabled</code>	<code>boolean</code>	enable locality load balancing, this is DestinationRule-level and will override mesh wide settings in entirety.
<code>failover</code>	<code>array</code>	Optional: only one of distribute, failover or failoverPriority can be set.
<code>failoverPriority</code>	<code>array</code>	failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

`array`

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute[]`

Type

`object`

Property	Type	Description
<code>from</code>	<code>string</code>	Originating locality, '/' separated, e.g.

Property	Type	Description
<code>to</code>	<code>object</code>	Map of upstream localities to traffic distribution weights.

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute[].to`

Description

Map of upstream localities to traffic distribution weights.

Type

`object`

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failover`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

`array`

`.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failover[]`

Type

`object`

Property	Type	Description
<code>from</code>	<code>string</code>	Originating region.

Property	Type	Description
to	string	

.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failoverPriority

Description

failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

Type

array

.spec.subsets[].trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failoverPriority[]

Type

string

.spec.subsets[].trafficPolicy.portLevelSettings[].outlierDetection

Type

object

Property	Type	Description
baseEjectionTime	string	Minimum ejection duration.

Property	Type	Description
<code>consecutive5xxErrors</code>	<code>integer</code>	Number of 5xx errors before a host is ejected from the connection pool.
<code>consecutiveErrors</code>	<code>integer</code>	
<code>consecutiveGatewayErrors</code>	<code>integer</code>	Number of gateway errors before a host is ejected from the connection pool.
<code>consecutiveLocalOriginFailures</code>	<code>integer</code>	
<code>interval</code>	<code>string</code>	Time interval between ejection sweep analysis.
<code>maxEjectionPercent</code>	<code>integer</code>	
<code>minHealthPercent</code>	<code>integer</code>	
<code>splitExternalLocalOriginErrors</code>	<code>boolean</code>	Determines whether to distinguish local origin failures from external errors.

`.spec.subsets[].trafficPolicy.portLevelSettings[].port`

Type

`object`

Property	Type	Description
number	integer	

`.spec.subsets[].trafficPolicy.portLevelSettings[].tls`

Description

TLS related settings for connections to the upstream service.

Type

object

Property	Type	Description
caCertificates	string	
clientCertificate	string	REQUIRED if mode is <code>MUTUAL</code> .
credentialName	string	
insecureSkipVerify	boolean	
mode	string	
privateKey	string	REQUIRED if mode is <code>MUTUAL</code> .
sni	string	SNI string to present to the server during TLS handshake.
subjectAltNames	array	

`.spec.subsets[].trafficPolicy.portLevelSettings[].tls.subjectAltNames`

Type

`array`

`.spec.subsets[].trafficPolicy.portLevelSettings[].tls.subjectAltNames[]`

Type

`string`

`.spec.subsets[].trafficPolicy.tls`

Description

TLS related settings for connections to the upstream service.

Type

`object`

Property	Type	Description
<code>caCertificates</code>	<code>string</code>	
<code>clientCertificate</code>	<code>string</code>	REQUIRED if mode is <code>MUTUAL</code> .
<code>credentialName</code>	<code>string</code>	
<code>insecureSkipVerify</code>	<code>boolean</code>	
<code>mode</code>	<code>string</code>	

Property	Type	Description
<code>privateKey</code>	<code>string</code>	REQUIRED if mode is <code>MUTUAL</code> .
<code>sni</code>	<code>string</code>	SNI string to present to the server during TLS handshake.
<code>subjectAltNames</code>	<code>array</code>	

`.spec.subsets[].trafficPolicy.tls.subjectAltNames`

Type

`array`

`.spec.subsets[].trafficPolicy.tls.subjectAltNames[]`

Type

`string`

`.spec.subsets[].trafficPolicy.tunnel`

Type

`object`

Property	Type	Description
<code>protocol</code>	<code>string</code>	Specifies which protocol to use for tunneling the downstream connection.

Property	Type	Description
<code>targetHost</code>	<code>string</code>	Specifies a host to which the downstream connection is tunneled.
<code>targetPort</code>	<code>integer</code>	Specifies a port to which the downstream connection is tunneled.

`.spec.trafficPolicy`

Type

`object`

Property	Type	Description
<code>connectionPool</code>	<code>object</code>	
<code>loadBalancer</code>	<code>object</code>	Settings controlling the load balancer algorithms.
<code>outlierDetection</code>	<code>object</code>	
<code>portLevelSettings</code>	<code>array</code>	Traffic policies specific to individual ports.
<code>tls</code>	<code>object</code>	TLS related settings for connections to the upstream service.
<code>tunnel</code>	<code>object</code>	

`.spec.trafficPolicy.connectionPool`

Type

object

Property	Type	Description
http	object	HTTP connection pool settings.
tcp	object	Settings common to both HTTP and TCP upstream connections.

.spec.trafficPolicy.connectionPool.http

Description

HTTP connection pool settings.

Type

object

Property	Type	Description
h2UpgradePolicy	string	Specify if http1.1 connection should be upgraded to http2 for the associated destination.
http1MaxPendingRequests	integer	
http2MaxRequests	integer	Maximum number of active requests to a destination.

Property	Type	Description
<code>idleTimeout</code>	<code>string</code>	The idle timeout for upstream connection pool connections.
<code>maxRequestsPerConnection</code>	<code>integer</code>	Maximum number of requests per connection to a backend.
<code>maxRetries</code>	<code>integer</code>	
<code>useClientProtocol</code>	<code>boolean</code>	If set to true, client protocol will be preserved while initiating connection to backend.

`.spec.trafficPolicy.connectionPool.tcp`

Description

Settings common to both HTTP and TCP upstream connections.

Type

`object`

Property	Type	Description
<code>connectTimeout</code>	<code>string</code>	TCP connection timeout.
<code>maxConnectionDuration</code>	<code>string</code>	The maximum duration of a connection.

Property	Type	Description
<code>maxConnections</code>	<code>integer</code>	Maximum number of HTTP1 /TCP connections to a destination host.
<code>tcpKeepalive</code>	<code>object</code>	If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

`.spec.trafficPolicy.connectionPool.tcp.tcpKeepalive`

Description

If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

Type

`object`

Property	Type	Description
<code>interval</code>	<code>string</code>	The time duration between keep-alive probes.
<code>probes</code>	<code>integer</code>	
<code>time</code>	<code>string</code>	

`.spec.trafficPolicy.loadBalancer`

Description

Settings controlling the load balancer algorithms.

Type

`object`

Property	Type	Description
<code>consistentHash</code>	<code>object</code>	
<code>localityLbSetting</code>	<code>object</code>	
<code>simple</code>	<code>string</code>	
<code>warmupDurationSecs</code>	<code>string</code>	Represents the warmup duration of Service.

`.spec.trafficPolicy.loadBalancer.consistentHash`

Type

`object`

Property	Type	Description
<code>httpCookie</code>	<code>object</code>	Hash based on HTTP cookie.
<code>httpHeaderName</code>	<code>string</code>	Hash based on a specific HTTP header.
<code>httpQueryParameterName</code>	<code>string</code>	Hash based on a specific HTTP query parameter.
<code>maglev</code>	<code>object</code>	The Maglev load balancer implements consistent hashing to backend hosts.
<code>minimumRingSize</code>	<code>integer</code>	Deprecated.

Property	Type	Description
ringHash	object	The ring/modulo hash load balancer implements consistent hashing to backend hosts.
useSourceIp	boolean	Hash based on the source IP address.

.spec.trafficPolicy.loadBalancer.consistentHash.httpCookie

Description

Hash based on HTTP cookie.

Type

object

Property	Type	Description
name	string	Name of the cookie.
path	string	Path to set for the cookie.
ttl	string	Lifetime of the cookie.

.spec.trafficPolicy.loadBalancer.consistentHash.maglev

Description

The Maglev load balancer implements consistent hashing to backend hosts.

Type

object

Property	Type	Description
<code>tableSize</code>	<code>integer</code>	The table size for Maglev hashing.

`.spec.trafficPolicy.loadBalancer.consistentHash.ringHash`

Description

The ring/modulo hash load balancer implements consistent hashing to backend hosts.

Type

object

Property	Type	Description
<code>minimumRingSize</code>	<code>integer</code>	

`.spec.trafficPolicy.loadBalancer.localityLbSetting`

Type

object

Property	Type	Description
<code>distribute</code>	<code>array</code>	Optional: only one of distribute, failover or failoverPriority can be set.

Property	Type	Description
<code>enabled</code>	<code>boolean</code>	enable locality load balancing, this is DestinationRule-level and will override mesh wide settings in entirety.
<code>failover</code>	<code>array</code>	Optional: only one of distribute, failover or failoverPriority can be set.
<code>failoverPriority</code>	<code>array</code>	failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

`.spec.trafficPolicy.loadBalancer.localityLbSetting.distribute`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

`array`

`.spec.trafficPolicy.loadBalancer.localityLbSetting.distribute[]`

Type

`object`

Property	Type	Description
<code>from</code>	<code>string</code>	Originating locality, '/' separated, e.g.

Property	Type	Description
<code>to</code>	<code>object</code>	Map of upstream localities to traffic distribution weights.

`.spec.trafficPolicy.loadBalancer.localityLbSetting.distribute[].to`

Description

Map of upstream localities to traffic distribution weights.

Type

`object`

`.spec.trafficPolicy.loadBalancer.localityLbSetting.failover`

Description

Optional: only one of `distribute`, `failover` or `failoverPriority` can be set.

Type

`array`

`.spec.trafficPolicy.loadBalancer.localityLbSetting.failover[]`

Type

`object`

Property	Type	Description
<code>from</code>	<code>string</code>	Originating region.

Property	Type	Description
<code>to</code>	<code>string</code>	

`.spec.trafficPolicy.loadBalancer.localityLbSetting.failoverPriority`

Description

failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

Type

`array`

`.spec.trafficPolicy.loadBalancer.localityLbSetting.failoverPriority[]`

Type

`string`

`.spec.trafficPolicy.outlierDetection`

Type

`object`

Property	Type	Description
<code>baseEjectionTime</code>	<code>string</code>	Minimum ejection duration.
<code>consecutive5xxErrors</code>	<code>integer</code>	Number of 5xx errors before a host is ejected from the connection pool.

Property	Type	Description
<code>consecutiveErrors</code>	<code>integer</code>	
<code>consecutiveGatewayErrors</code>	<code>integer</code>	Number of gateway errors before a host is ejected from the connection pool.
<code>consecutiveLocalOriginFailures</code>	<code>integer</code>	
<code>interval</code>	<code>string</code>	Time interval between ejection sweep analysis.
<code>maxEjectionPercent</code>	<code>integer</code>	
<code>minHealthPercent</code>	<code>integer</code>	
<code>splitExternalLocalOriginErrors</code>	<code>boolean</code>	Determines whether to distinguish local origin failures from external errors.

`.spec.trafficPolicy.portLevelSettings`

Description

Traffic policies specific to individual ports.

Type

`array`

`.spec.trafficPolicy.portLevelSettings[]`

Type

object

Property	Type	Description
connectionPool	object	
loadBalancer	object	Settings controlling the load balancer algorithms.
outlierDetection	object	
port	object	
tls	object	TLS related settings for connections to the upstream service.

.spec.trafficPolicy.portLevelSettings[].connectionPool

Type

object

Property	Type	Description
http	object	HTTP connection pool settings.
tcp	object	Settings common to both HTTP and TCP upstream connections.

.spec.trafficPolicy.portLevelSettings[].connectionPool.http

Description

HTTP connection pool settings.

Type

object

Property	Type	Description
<code>h2UpgradePolicy</code>	<code>string</code>	Specify if http1.1 connection should be upgraded to http2 for the associated destination.
<code>http1MaxPendingRequests</code>	<code>integer</code>	
<code>http2MaxRequests</code>	<code>integer</code>	Maximum number of active requests to a destination.
<code>idleTimeout</code>	<code>string</code>	The idle timeout for upstream connection pool connections.
<code>maxRequestsPerConnection</code>	<code>integer</code>	Maximum number of requests per connection to a backend.
<code>maxRetries</code>	<code>integer</code>	
<code>useClientProtocol</code>	<code>boolean</code>	If set to true, client protocol will be preserved while initiating connection to backend.

.spec.trafficPolicy.portLevelSettings[].connectionPool.tcp

Description

Settings common to both HTTP and TCP upstream connections.

Type

object

Property	Type	Description
<code>connectTimeout</code>	string	TCP connection timeout.
<code>maxConnectionDuration</code>	string	The maximum duration of a connection.
<code>maxConnections</code>	integer	Maximum number of HTTP1 /TCP connections to a destination host.
<code>tcpKeepalive</code>	object	If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

`.spec.trafficPolicy.portLevelSettings[].connectionPool.tcp.tcpKeepalive`

Description

If set then set SO_KEEPALIVE on the socket to enable TCP Keepalives.

Type

object

Property	Type	Description
<code>interval</code>	string	The time duration between keep-alive probes.

Property	Type	Description
probes	integer	
time	string	

`.spec.trafficPolicy.portLevelSettings[].loadBalancer`

Description

Settings controlling the load balancer algorithms.

Type

object

Property	Type	Description
consistentHash	object	
localityLbSetting	object	
simple	string	
warmupDurationSecs	string	Represents the warmup duration of Service.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.consistentHash`

Type

object

Property	Type	Description
httpCookie	object	Hash based on HTTP cookie.

Property	Type	Description
<code>httpHeaderName</code>	<code>string</code>	Hash based on a specific HTTP header.
<code>httpQueryParameterName</code>	<code>string</code>	Hash based on a specific HTTP query parameter.
<code>maglev</code>	<code>object</code>	The Maglev load balancer implements consistent hashing to backend hosts.
<code>minimumRingSize</code>	<code>integer</code>	Deprecated.
<code>ringHash</code>	<code>object</code>	The ring/modulo hash load balancer implements consistent hashing to backend hosts.
<code>useSourceIp</code>	<code>boolean</code>	Hash based on the source IP address.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.httpCookie`

Description

Hash based on HTTP cookie.

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Name of the cookie.
<code>path</code>	<code>string</code>	Path to set for the cookie.
<code>ttl</code>	<code>string</code>	Lifetime of the cookie.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.maglev`

Description

The Maglev load balancer implements consistent hashing to backend hosts.

Type

`object`

Property	Type	Description
<code>tableSize</code>	<code>integer</code>	The table size for Maglev hashing.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.consistentHash.ringHash`

Description

The ring/modulo hash load balancer implements consistent hashing to backend hosts.

Type

`object`

Property	Type	Description
<code>minimumRingSize</code>	<code>integer</code>	

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting`

Type

`object`

Property	Type	Description
<code>distribute</code>	<code>array</code>	Optional: only one of <code>distribute</code> , <code>failover</code> or <code>failoverPriority</code> can be set.
<code>enabled</code>	<code>boolean</code>	enable locality load balancing, this is <code>DestinationRule</code> -level and will override mesh wide settings in entirety.
<code>failover</code>	<code>array</code>	Optional: only one of <code>distribute</code> , <code>failover</code> or <code>failoverPriority</code> can be set.
<code>failoverPriority</code>	<code>array</code>	<code>failoverPriority</code> is an ordered list of labels used to sort endpoints to do priority based load balancing.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

array

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute[]`

Type

object

Property	Type	Description
<code>from</code>	<code>string</code>	Originating locality, '/' separated, e.g.
<code>to</code>	<code>object</code>	Map of upstream localities to traffic distribution weights.

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.distribute[].to`

Description

Map of upstream localities to traffic distribution weights.

Type

object

`.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failover`

Description

Optional: only one of distribute, failover or failoverPriority can be set.

Type

array

.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failover[]**Type**

object

Property	Type	Description
from	string	Originating region.
to	string	

.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failoverPriority**Description**

failoverPriority is an ordered list of labels used to sort endpoints to do priority based load balancing.

Type

array

.spec.trafficPolicy.portLevelSettings[].loadBalancer.localityLbSetting.failoverPriority[]**Type**

string

.spec.trafficPolicy.portLevelSettings[].outlierDetection

Type

object

Property	Type	Description
<code>baseEjectionTime</code>	<code>string</code>	Minimum ejection duration.
<code>consecutive5xxErrors</code>	<code>integer</code>	Number of 5xx errors before a host is ejected from the connection pool.
<code>consecutiveErrors</code>	<code>integer</code>	
<code>consecutiveGatewayErrors</code>	<code>integer</code>	Number of gateway errors before a host is ejected from the connection pool.
<code>consecutiveLocalOriginFailures</code>	<code>integer</code>	
<code>interval</code>	<code>string</code>	Time interval between ejection sweep analysis.
<code>maxEjectionPercent</code>	<code>integer</code>	
<code>minHealthPercent</code>	<code>integer</code>	
<code>splitExternalLocalOriginErrors</code>	<code>boolean</code>	Determines whether to distinguish local origin failures from external errors.

.spec.trafficPolicy.portLevelSettings[].port

Type

object

Property	Type	Description
number	integer	

.spec.trafficPolicy.portLevelSettings[].tls

Description

TLS related settings for connections to the upstream service.

Type

object

Property	Type	Description
caCertificates	string	
clientCertificate	string	REQUIRED if mode is <code>MUTUAL</code> .
credentialName	string	
insecureSkipVerify	boolean	
mode	string	
privateKey	string	REQUIRED if mode is <code>MUTUAL</code> .

Property	Type	Description
sni	string	SNI string to present to the server during TLS handshake.
subjectAltNames	array	

`.spec.trafficPolicy.portLevelSettings[].tls.subjectAltNames`

Type

array

`.spec.trafficPolicy.portLevelSettings[].tls.subjectAltNames`

[]

Type

string

`.spec.trafficPolicy.tls`

Description

TLS related settings for connections to the upstream service.

Type

object

Property	Type	Description
caCertificates	string	
clientCertificate	string	REQUIRED if mode is <code>MUTUAL</code> .

Property	Type	Description
<code>credentialName</code>	<code>string</code>	
<code>insecureSkipVerify</code>	<code>boolean</code>	
<code>mode</code>	<code>string</code>	
<code>privateKey</code>	<code>string</code>	REQUIRED if mode is <code>MUTUAL</code> .
<code>sni</code>	<code>string</code>	SNI string to present to the server during TLS handshake.
<code>subjectAltNames</code>	<code>array</code>	

`.spec.trafficPolicy.tls.subjectAltNames`

Type

`array`

`.spec.trafficPolicy.tls.subjectAltNames[]`

Type

`string`

`.spec.trafficPolicy.tunnel`

Type

`object`

Property	Type	Description
<code>protocol</code>	<code>string</code>	Specifies which protocol to use for tunneling the downstream connection.
<code>targetHost</code>	<code>string</code>	Specifies a host to which the downstream connection is tunneled.
<code>targetPort</code>	<code>integer</code>	Specifies a port to which the downstream connection is tunneled.

`.spec.workloadSelector`

Type

`object`

Property	Type	Description
<code>matchLabels</code>	<code>object</code>	

`.spec.workloadSelector.matchLabels`

Type

`object`

`.status`

Type

`object`

API Endpoints

The following API endpoints are available:

- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules`
 - **DELETE** : delete collection of DestinationRule
 - **GET** : list objects of kind DestinationRule
 - **POST** : create a new DestinationRule
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules/{name}`
 - **DELETE** : delete the specified DestinationRule
 - **GET** : read the specified DestinationRule
 - **PATCH** : partially update the specified DestinationRule
 - **PUT** : replace the specified DestinationRule
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules/{name}/status`
 - **GET** : read status of the specified DestinationRule
 - **PATCH** : partially update status of the specified DestinationRule
 - **PUT** : replace status of the specified DestinationRule

`/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules`

HTTP method

DELETE

Description

delete collection of DestinationRule

HTTP responses

HTTP code	Response body
200 - OK	<code>Status</code> schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind DestinationRule

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRuleList</code> schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new DestinationRule

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last

Parameter	Type	Description
		duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
body	DestinationRule schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	DestinationRule schema
201 - Created	DestinationRule schema
202 - Accepted	DestinationRule schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules/{name}

HTTP method

DELETE

Description

delete the specified DestinationRule

Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

HTTP responses

HTTP code	Response body
200 - OK	Status ↗ schema
202 - Accepted	Status ↗ schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified DestinationRule

HTTP responses

HTTP code	Response body
200 - OK	DestinationRule schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified DestinationRule

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRule</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace the specified DestinationRule

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>DestinationRule</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRule</code> schema

HTTP code	Response body
201 - Created	<code>DestinationRule</code> schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/destinationrules/{name}/status

HTTP method

GET

Description

read status of the specified DestinationRule

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRule</code> schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified DestinationRule

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

Parameter	Type	Description
<code>fieldValidation</code>	<code>string</code>	<p><code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are:</p> <ul style="list-style-type: none"> - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+. - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRule</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace status of the specified `DestinationRule`

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing

Parameter	Type	Description
		of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	fieldValidation instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>DestinationRule</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>DestinationRule</code> schema
201 - Created	<code>DestinationRule</code> schema
401 - Unauthorized	Empty

Type

object

Specification

Property	Type	Description
<code>spec</code>	object	Configuration affecting edge load balancer. See more details at: https://istio.io/docs/reference/config/networking/gateway.html ↗
<code>status</code>	object	

.spec

Description

Configuration affecting edge load balancer. See more details at: <https://istio.io/docs/reference/config/networking/gateway.html>

Type

object

Property	Type	Description
<code>selector</code>	object	

Property	Type	Description
<code>servers</code>	<code>array</code>	A list of server specifications.

`.spec.selector`

Type

`object`

`.spec.servers`

Description

A list of server specifications.

Type

`array`

`.spec.servers[]`

Type

`object`

Property	Type	Description
<code>bind</code>	<code>string</code>	
<code>defaultEndpoint</code>	<code>string</code>	
<code>hosts</code>	<code>array</code>	One or more hosts exposed by this gateway.

Property	Type	Description
<code>name</code>	<code>string</code>	An optional name of the server, when set must be unique across all servers.
<code>port</code>	<code>object</code>	
<code>tls</code>	<code>object</code>	Set of TLS related options that govern the server's behavior.

`.spec.servers[].hosts`

Description

One or more hosts exposed by this gateway.

Type

`array`

`.spec.servers[].hosts[]`

Type

`string`

`.spec.servers[].port`

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Label assigned to the port.
<code>number</code>	<code>integer</code>	A valid non-negative integer port number.
<code>protocol</code>	<code>string</code>	The protocol exposed on the port.
<code>targetPort</code>	<code>integer</code>	

`.spec.servers[].tls`

Description

Set of TLS related options that govern the server's behavior.

Type

`object`

Property	Type	Description
<code>caCertificates</code>	<code>string</code>	REQUIRED if mode is <code>MUTUAL</code> .
<code>cipherSuites</code>	<code>array</code>	Optional: If specified, only support the specified cipher list.
<code>credentialName</code>	<code>string</code>	
<code>httpsRedirect</code>	<code>boolean</code>	

Property	Type	Description
<code>maxProtocolVersion</code>	<code>string</code>	Optional: Maximum TLS protocol version.
<code>minProtocolVersion</code>	<code>string</code>	Optional: Minimum TLS protocol version.
<code>mode</code>	<code>string</code>	
<code>privateKey</code>	<code>string</code>	REQUIRED if mode is <code>SIMPLE</code> or <code>MUTUAL</code> .
<code>serverCertificate</code>	<code>string</code>	REQUIRED if mode is <code>SIMPLE</code> or <code>MUTUAL</code> .
<code>subjectAltNames</code>	<code>array</code>	
<code>verifyCertificateHash</code>	<code>array</code>	
<code>verifyCertificateSpki</code>	<code>array</code>	

`.spec.servers[].tls.cipherSuites`

Description

Optional: If specified, only support the specified cipher list.

Type

`array`

`.spec.servers[].tls.cipherSuites[]`

Type

`string`

.spec.servers[].tls.subjectAltNames

Type

array

.spec.servers[].tls.subjectAltNames[]

Type

string

.spec.servers[].tls.verifyCertificateHash

Type

array

.spec.servers[].tls.verifyCertificateHash[]

Type

string

.spec.servers[].tls.verifyCertificateSpki

Type

array

.spec.servers[].tls.verifyCertificateSpki[]

Type

string

.status

Type

object

API Endpoints

The following API endpoints are available:

- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways`
 - **DELETE** : delete collection of Gateway
 - **GET** : list objects of kind Gateway
 - **POST** : create a new Gateway
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways/{name}`
 - **DELETE** : delete the specified Gateway
 - **GET** : read the specified Gateway
 - **PATCH** : partially update the specified Gateway
 - **PUT** : replace the specified Gateway
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways/{name}/status`
 - **GET** : read status of the specified Gateway
 - **PATCH** : partially update status of the specified Gateway
 - **PUT** : replace status of the specified Gateway

`/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways`

HTTP method

DELETE

Description

delete collection of Gateway

HTTP responses

HTTP code	Response body
200 - OK	<code>Status</code> schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind Gateway

HTTP responses

HTTP code	Response body
200 - OK	<code>GatewayList</code> schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new Gateway

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore:

Parameter	Type	Description
		This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
body	Gateway schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	Gateway schema
201 - Created	Gateway schema
202 - Accepted	Gateway schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways/{name}

HTTP method

DELETE

Description

delete the specified Gateway

Query parameters

Parameter	Type	Description
dryRun	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

HTTP responses

HTTP code	Response body
200 - OK	Status ↗ schema
202 - Accepted	Status ↗ schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified Gateway

HTTP responses

HTTP code	Response body
200 - OK	Gateway schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified Gateway

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>Gateway</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace the specified Gateway

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Gateway</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Gateway</code> schema
201 - Created	<code>Gateway</code> schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/gateways/{name}/status

HTTP method

GET

Description

read status of the specified Gateway

HTTP responses

HTTP code	Response body
200 - OK	<code>Gateway</code> schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified Gateway

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing

Parameter	Type	Description
		of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<p><code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.</p>

HTTP responses

HTTP code	Response body
200 - OK	<code>Gateway</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace status of the specified Gateway

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Gateway</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Gateway</code> schema
201 - Created	<code>Gateway</code> schema
401 - Unauthorized	Empty

Type

object

Specification

Property	Type	Description
<code>spec</code>	object	Configuration affecting network reachability of a sidecar. See more details at: https://istio.io/docs/reference/config/networking/sidecar.html
<code>status</code>	object	

.spec

Description

Configuration affecting network reachability of a sidecar. See more details at:
<https://istio.io/docs/reference/config/networking/sidecar.html>

Type

object

Property	Type	Description
<code>egress</code>	array	
<code>ingress</code>	array	

Property	Type	Description
<code>outboundTrafficPolicy</code>	<code>object</code>	Configuration for the outbound traffic policy.
<code>workloadSelector</code>	<code>object</code>	

`.spec.egress`

Type

`array`

`.spec.egress[]`

Type

`object`

Property	Type	Description
<code>bind</code>	<code>string</code>	
<code>captureMode</code>	<code>string</code>	
<code>hosts</code>	<code>array</code>	
<code>port</code>	<code>object</code>	The port associated with the listener.

`.spec.egress[].hosts`

Type

`array`

`.spec.egress[].hosts[]`

Type

`string`

`.spec.egress[].port`

Description

The port associated with the listener.

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Label assigned to the port.
<code>number</code>	<code>integer</code>	A valid non-negative integer port number.
<code>protocol</code>	<code>string</code>	The protocol exposed on the port.
<code>targetPort</code>	<code>integer</code>	

`.spec.ingress`

Type

`array`

`.spec.ingress[]`

Type

object

Property	Type	Description
bind	string	The IP(IPv4 or IPv6) to which the listener should be bound.
captureMode	string	
defaultEndpoint	string	
port	object	The port associated with the listener.
tls	object	

.spec.ingress[].port

Description

The port associated with the listener.

Type

object

Property	Type	Description
name	string	Label assigned to the port.
number	integer	A valid non-negative integer port number.
protocol	string	The protocol exposed on the port.

Property	Type	Description
<code>targetPort</code>	<code>integer</code>	

`.spec.ingress[].tls`

Type

`object`

Property	Type	Description
<code>caCertificates</code>	<code>string</code>	REQUIRED if mode is <code>MUTUAL</code> .
<code>cipherSuites</code>	<code>array</code>	Optional: If specified, only support the specified cipher list.
<code>credentialName</code>	<code>string</code>	
<code>httpsRedirect</code>	<code>boolean</code>	
<code>maxProtocolVersion</code>	<code>string</code>	Optional: Maximum TLS protocol version.
<code>minProtocolVersion</code>	<code>string</code>	Optional: Minimum TLS protocol version.
<code>mode</code>	<code>string</code>	
<code>privateKey</code>	<code>string</code>	REQUIRED if mode is <code>SIMPLE</code> or <code>MUTUAL</code> .

Property	Type	Description
<code>serverCertificate</code>	<code>string</code>	REQUIRED if mode is <code>SIMPLE</code> or <code>MUTUAL</code> .
<code>subjectAltNames</code>	<code>array</code>	
<code>verifyCertificateHash</code>	<code>array</code>	
<code>verifyCertificateSpki</code>	<code>array</code>	

`.spec.ingress[].tls.cipherSuites`

Description

Optional: If specified, only support the specified cipher list.

Type

`array`

`.spec.ingress[].tls.cipherSuites[]`

Type

`string`

`.spec.ingress[].tls.subjectAltNames`

Type

`array`

`.spec.ingress[].tls.subjectAltNames[]`

Type

`string`

`.spec.ingress[].tls.verifyCertificateHash`

Type

array

`.spec.ingress[].tls.verifyCertificateHash[]`

Type

string

`.spec.ingress[].tls.verifyCertificateSpki`

Type

array

`.spec.ingress[].tls.verifyCertificateSpki[]`

Type

string

`.spec.outboundTrafficPolicy`

Description

Configuration for the outbound traffic policy.

Type

object

Property	Type	Description
<code>egressProxy</code>	object	
<code>mode</code>	string	

.spec.outboundTrafficPolicy.egressProxy

Type

object

Property	Type	Description
host	string	The name of a service from the service registry.
port	object	Specifies the port on the host that is being addressed.
subset	string	The name of a subset within the service.

.spec.outboundTrafficPolicy.egressProxy.port

Description

Specifies the port on the host that is being addressed.

Type

object

Property	Type	Description
number	integer	

.spec.workloadSelector

Type

object

Property	Type	Description
labels	object	

.spec.workloadSelector.labels

Type

object

.status

Type

object

API Endpoints

The following API endpoints are available:

- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars`
 - **DELETE** : delete collection of Sidecar
 - **GET** : list objects of kind Sidecar
 - **POST** : create a new Sidecar
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars/{name}`
 - **DELETE** : delete the specified Sidecar
 - **GET** : read the specified Sidecar
 - **PATCH** : partially update the specified Sidecar
 - **PUT** : replace the specified Sidecar
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars/{name}/status`

- **GET** : read status of the specified Sidecar
- **PATCH** : partially update status of the specified Sidecar
- **PUT** : replace status of the specified Sidecar

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars

HTTP method

DELETE

Description

delete collection of Sidecar

HTTP responses

HTTP code	Response body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind Sidecar

HTTP responses

HTTP code	Response body
200 - OK	SidecarList schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Sidecar</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Sidecar</code> schema

HTTP code	Response body
201 - Created	<code>Sidecar</code> schema
202 - Accepted	<code>Sidecar</code> schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars/{name}

HTTP method

DELETE

Description

delete the specified Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

HTTP responses

HTTP code	Response body
200 - OK	<code>Status</code> schema
202 - Accepted	<code>Status</code> schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified Sidecar

HTTP responses

HTTP code	Response body
200 - OK	<code>Sidecar</code> schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are

Parameter	Type	Description
		present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>Sidecar</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace the specified Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a

Parameter	Type	Description
		BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
body	Sidecar schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	Sidecar schema
201 - Created	Sidecar schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/sidecars/{name}/status

HTTP method

GET

Description

read status of the specified Sidecar

HTTP responses

HTTP code	Response body
200 - OK	Sidecar schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	string	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	string	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>Sidecar</code> schema
401 - Unauthorized	Empty

HTTP method

PUT

Description

replace status of the specified Sidecar

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>Sidecar</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>Sidecar</code> schema
201 - Created	<code>Sidecar</code> schema
401 - Unauthorized	Empty

Type

object

Specification

Property	Type	Description
<code>spec</code>	object	Configuration affecting label/content routing, sni routing, etc. See more details at: https://istio.io/docs/reference/config/networking/virtual-service.html
<code>status</code>	object	

.spec

Description

Configuration affecting label/content routing, sni routing, etc. See more details at:
<https://istio.io/docs/reference/config/networking/virtual-service.html>

Type

object

Property	Type	Description
<code>exportTo</code>	<code>array</code>	A list of namespaces to which this virtual service is exported.
<code>gateways</code>	<code>array</code>	The names of gateways and sidecars that should apply these routes.
<code>hosts</code>	<code>array</code>	The destination hosts to which traffic is being sent.
<code>http</code>	<code>array</code>	An ordered list of route rules for HTTP traffic.
<code>tcp</code>	<code>array</code>	An ordered list of route rules for opaque TCP traffic.
<code>tls</code>	<code>array</code>	

`.spec.exportTo`

Description

A list of namespaces to which this virtual service is exported.

Type

`array`

`.spec.exportTo[]`

Type

`string`

.spec gateways

Description

The names of gateways and sidecars that should apply these routes.

Type

array

.spec gateways[]

Type

string

.spec hosts

Description

The destination hosts to which traffic is being sent.

Type

array

.spec hosts[]

Type

string

.spec http

Description

An ordered list of route rules for HTTP traffic.

Type

array

.spec.http[]

Type

object

Property	Type	Description
<code>corsPolicy</code>	object	Cross-Origin Resource Sharing policy (CORS).
<code>delegate</code>	object	
<code>directResponse</code>	object	A HTTP rule can either return a <code>direct_response</code> , <code>redirect</code> or <code>forward</code> (default) traffic.
<code>fault</code>	object	Fault injection policy to apply on HTTP traffic at the client side.
<code>headers</code>	object	
<code>match</code>	array	
<code>mirror</code>	object	
<code>mirror_percent</code>	integer	Percentage of the traffic to be mirrored by the <code>mirror</code> field.
<code>mirrorPercent</code>	integer	Percentage of the traffic to be mirrored by the <code>mirror</code> field.

Property	Type	Description
<code>mirrorPercentage</code>	<code>object</code>	Percentage of the traffic to be mirrored by the <code>mirror</code> field.
<code>name</code>	<code>string</code>	The name assigned to the route for debugging purposes.
<code>redirect</code>	<code>object</code>	A HTTP rule can either return a <code>direct_response</code> , <code>redirect</code> or <code>forward</code> (default) traffic.
<code>retries</code>	<code>object</code>	Retry policy for HTTP requests.
<code>rewrite</code>	<code>object</code>	Rewrite HTTP URIs and Authority headers.
<code>route</code>	<code>array</code>	A HTTP rule can either return a <code>direct_response</code> , <code>redirect</code> or <code>forward</code> (default) traffic.
<code>timeout</code>	<code>string</code>	Timeout for HTTP requests, default is disabled.

`.spec.http[].corsPolicy`

Description

Cross-Origin Resource Sharing policy (CORS).

Type

`object`

Property	Type	Description
<code>allowCredentials</code>	<code>boolean</code>	
<code>allowHeaders</code>	<code>array</code>	
<code>allowMethods</code>	<code>array</code>	List of HTTP methods allowed to access the resource.
<code>allowOrigin</code>	<code>array</code>	The list of origins that are allowed to perform CORS requests.
<code>allowOrigins</code>	<code>array</code>	String patterns that match allowed origins.
<code>exposeHeaders</code>	<code>array</code>	
<code>maxAge</code>	<code>string</code>	

`.spec.http[].corsPolicy.allowHeaders`

Type

`array`

`.spec.http[].corsPolicy.allowHeaders[]`

Type

`string`

`.spec.http[].corsPolicy.allowMethods`

Description

List of HTTP methods allowed to access the resource.

Type

array

.spec.http[].corsPolicy.allowMethods[]**Type**

string

.spec.http[].corsPolicy.allowOrigin**Description**

The list of origins that are allowed to perform CORS requests.

Type

array

.spec.http[].corsPolicy.allowOrigin[]**Type**

string

.spec.http[].corsPolicy.allowOrigins**Description**

String patterns that match allowed origins.

Type

array

.spec.http[].corsPolicy.allowOrigins[]**Type**

object

Property	Type	Description
<code>exact</code>	<code>string</code>	
<code>prefix</code>	<code>string</code>	
<code>regex</code>	<code>string</code>	RE2 style regex-based match (https://github.com/google/re2/wiki/Syntax ^).

`.spec.http[].corsPolicy.exposeHeaders`

Type

`array`

`.spec.http[].corsPolicy.exposeHeaders[]`

Type

`string`

`.spec.http[].delegate`

Type

`object`

Property	Type	Description
<code>name</code>	<code>string</code>	Name specifies the name of the delegate VirtualService.
<code>namespace</code>	<code>string</code>	Namespace specifies the namespace where the delegate VirtualService resides.

`.spec.http[].directResponse`

Description

A HTTP rule can either return a `direct_response`, `redirect` or `forward` (default) traffic.

Type

object

Property	Type	Description
<code>body</code>	object	Specifies the content of the response body.
<code>status</code>	integer	Specifies the HTTP response status to be returned.

`.spec.http[].directResponse.body`

Description

Specifies the content of the response body.

Type

object

Property	Type	Description
<code>bytes</code>	string	response body as base64 encoded bytes.
<code>string</code>	string	

`.spec.http[].fault`

Description

Fault injection policy to apply on HTTP traffic at the client side.

Type

object

Property	Type	Description
abort	object	
delay	object	

.spec.http[].fault.abort**Type**

object

Property	Type	Description
grpcStatus	string	GRPC status code to use to abort the request.
http2Error	string	
httpStatus	integer	HTTP status code to use to abort the Http request.
percentage	object	Percentage of requests to be aborted with the error code provided.

.spec.http[].fault.abort.percentage**Description**

Percentage of requests to be aborted with the error code provided.

Type

object

Property	Type	Description
value	number	

`.spec.http[].fault.delay`

Type

object

Property	Type	Description
exponentialDelay	string	
fixedDelay	string	Add a fixed delay before forwarding the request.
percent	integer	Percentage of requests on which the delay will be injected (0-100).
percentage	object	Percentage of requests on which the delay will be injected.

`.spec.http[].fault.delay.percentage`

Description

Percentage of requests on which the delay will be injected.

Type

object

Property	Type	Description
value	number	

`.spec.http[].headers`

Type

object

Property	Type	Description
request	object	
response	object	

`.spec.http[].headers.request`

Type

object

Property	Type	Description
add	object	
remove	array	
set	object	

`.spec.http[].headers.request.add`

Type

object

`.spec.http[].headers.request.remove`

Type

array

.spec.http[].headers.request.remove[]**Type**

string

.spec.http[].headers.request.set**Type**

object

.spec.http[].headers.response**Type**

object

Property	Type	Description
add	object	
remove	array	
set	object	

.spec.http[].headers.response.add**Type**

object

.spec.http[].headers.response.remove**Type**

`array`

`.spec.http[].headers.response.remove[]`

Type

`string`

`.spec.http[].headers.response.set`

Type

`object`

`.spec.http[].match`

Type

`array`

`.spec.http[].match[]`

Type

`object`

Property	Type	Description
<code>authority</code>	<code>object</code>	
<code>gateways</code>	<code>array</code>	Names of gateways where the rule should be applied.
<code>headers</code>	<code>object</code>	

Property	Type	Description
<code>ignoreUriCase</code>	<code>boolean</code>	Flag to specify whether the URI matching should be case-insensitive.
<code>method</code>	<code>object</code>	
<code>name</code>	<code>string</code>	The name assigned to a match.
<code>port</code>	<code>integer</code>	Specifies the ports on the host that is being addressed.
<code>queryParams</code>	<code>object</code>	Query parameters for matching.
<code>scheme</code>	<code>object</code>	
<code>sourceLabels</code>	<code>object</code>	
<code>sourceNamespace</code>	<code>string</code>	Source namespace constraining the applicability of a rule to workloads in that namespace.
<code>statPrefix</code>	<code>string</code>	The human readable prefix to use when emitting statistics for this route.
<code>uri</code>	<code>object</code>	
<code>withoutHeaders</code>	<code>object</code>	<code>withoutHeader</code> has the same syntax with the header, but has opposite meaning.

`.spec.http[].match[].authority`

Type

object

Property	Type	Description
<code>exact</code>	<code>string</code>	
<code>prefix</code>	<code>string</code>	
<code>regex</code>	<code>string</code>	RE2 style regex-based match (https://github.com/google/re2/wiki/Syntax ^).

`.spec.http[].match[].gateways`

Description

Names of gateways where the rule should be applied.

Type

array

`.spec.http[].match[].gateways[]`

Type

string

`.spec.http[].match[].headers`

Type

object

`.spec.http[].match[].method`

Type

object

Property	Type	Description
exact	string	
prefix	string	
regex	string	RE2 style regex-based match (https://github.com/google/re2/wiki/Syntax ^).

.spec.http[].match[].queryParams

Description

Query parameters for matching.

Type

object

.spec.http[].match[].scheme

Type

object

Property	Type	Description
exact	string	
prefix	string	
regex	string	RE2 style regex-based match (https://github.com/google/re2/wiki/Syntax ^).

`.spec.http[].match[].sourceLabels`

Type

object

`.spec.http[].match[].uri`

Type

object

Property	Type	Description
<code>exact</code>	<code>string</code>	
<code>prefix</code>	<code>string</code>	
<code>regex</code>	<code>string</code>	RE2 style regex-based match (https://github.com/google/re2/wiki/Syntax ^).

`.spec.http[].match[].withoutHeaders`

Description

withoutHeader has the same syntax with the header, but has opposite meaning.

Type

object

`.spec.http[].mirror`

Type

object

Property	Type	Description
host	string	The name of a service from the service registry.
port	object	Specifies the port on the host that is being addressed.
subset	string	The name of a subset within the service.

`.spec.http[].mirror.port`

Description

Specifies the port on the host that is being addressed.

Type

object

Property	Type	Description
number	integer	

`.spec.http[].mirrorPercentage`

Description

Percentage of the traffic to be mirrored by the `mirror` field.

Type

object

Property	Type	Description
value	number	

.spec.http[].redirect

Description

A HTTP rule can either return a `direct_response`, `redirect` or `forward` (default) traffic.

Type

object

Property	Type	Description
<code>authority</code>	<code>string</code>	
<code>derivePort</code>	<code>string</code>	
<code>port</code>	<code>integer</code>	On a redirect, overwrite the port portion of the URL with this value.
<code>redirectCode</code>	<code>integer</code>	
<code>scheme</code>	<code>string</code>	On a redirect, overwrite the scheme portion of the URL with this value.
<code>uri</code>	<code>string</code>	

.spec.http[].retries

Description

Retry policy for HTTP requests.

Type

object

Property	Type	Description
<code>attempts</code>	<code>integer</code>	Number of retries to be allowed for a given request.
<code>perTryTimeout</code>	<code>string</code>	Timeout per attempt for a given request, including the initial call and any retries.
<code>retryOn</code>	<code>string</code>	Specifies the conditions under which retry takes place.
<code>retryRemoteLocalities</code>	<code>boolean</code>	Flag to specify whether the retries should retry to other localities.

`.spec.http[].rewrite`

Description

Rewrite HTTP URIs and Authority headers.

Type

`object`

Property	Type	Description
<code>authority</code>	<code>string</code>	rewrite the Authority/Host header with this value.
<code>uri</code>	<code>string</code>	

.spec.http[].route

Description

A HTTP rule can either return a `direct_response`, `redirect` or `forward` (default) traffic.

Type

array

.spec.http[].route[]

Type

object

Property	Type	Description
<code>destination</code>	object	
<code>headers</code>	object	
<code>weight</code>	integer	Weight specifies the relative proportion of traffic to be forwarded to the destination.

.spec.http[].route[].destination

Type

object

Property	Type	Description
<code>host</code>	string	The name of a service from the service registry.

Property	Type	Description
port	object	Specifies the port on the host that is being addressed.
subset	string	The name of a subset within the service.

`.spec.http[].route[].destination.port`

Description

Specifies the port on the host that is being addressed.

Type

object

Property	Type	Description
number	integer	

`.spec.http[].route[].headers`

Type

object

Property	Type	Description
request	object	
response	object	

`.spec.http[].route[].headers.request`

Type

object

Property	Type	Description
add	object	
remove	array	
set	object	

.spec.http[].route[].headers.request.add

Type

object

.spec.http[].route[].headers.request.remove

Type

array

.spec.http[].route[].headers.request.remove[]

Type

string

.spec.http[].route[].headers.request.set

Type

object

.spec.http[].route[].headers.response

Type

object

Property	Type	Description
add	object	
remove	array	
set	object	

.spec.http[].route[].headers.response.add

Type

object

.spec.http[].route[].headers.response.remove

Type

array

.spec.http[].route[].headers.response.remove[]

Type

string

.spec.http[].route[].headers.response.set

Type

object

.spec.tcp

Description

An ordered list of route rules for opaque TCP traffic.

Type

array

.spec.tcp[]

Type

object

Property	Type	Description
match	array	
route	array	The destination to which the connection should be forwarded to.

.spec.tcp[].match

Type

array

.spec.tcp[].match[]

Type

object

Property	Type	Description
destinationSubnets	array	IPv4 or IPv6 ip addresses of destination with optional subnet.
gateways	array	Names of gateways where the rule should be applied.

Property	Type	Description
<code>port</code>	<code>integer</code>	Specifies the port on the host that is being addressed.
<code>sourceLabels</code>	<code>object</code>	
<code>sourceNamespace</code>	<code>string</code>	Source namespace constraining the applicability of a rule to workloads in that namespace.
<code>sourceSubnet</code>	<code>string</code>	IPv4 or IPv6 ip address of source with optional subnet.

`.spec.tcp[].match[].destinationSubnets`

Description

IPv4 or IPv6 ip addresses of destination with optional subnet.

Type

`array`

`.spec.tcp[].match[].destinationSubnets[]`

Type

`string`

`.spec.tcp[].match[].gateways`

Description

Names of gateways where the rule should be applied.

Type

`array`

`.spec.tcp[].match[].gateways[]`

Type

`string`

`.spec.tcp[].match[].sourceLabels`

Type

`object`

`.spec.tcp[].route`

Description

The destination to which the connection should be forwarded to.

Type

`array`

`.spec.tcp[].route[]`

Type

`object`

Property	Type	Description
<code>destination</code>	<code>object</code>	
<code>weight</code>	<code>integer</code>	Weight specifies the relative proportion of traffic to be forwarded to the destination.

`.spec.tcp[].route[].destination`

Type

object

Property	Type	Description
host	string	The name of a service from the service registry.
port	object	Specifies the port on the host that is being addressed.
subset	string	The name of a subset within the service.

`.spec.tcp[].route[].destination.port`

Description

Specifies the port on the host that is being addressed.

Type

object

Property	Type	Description
number	integer	

`.spec.tls`

Type

array

`.spec.tls[]`

Type

object

Property	Type	Description
<code>match</code>	array	
<code>route</code>	array	The destination to which the connection should be forwarded to.

`.spec.tls[].match`

Type

array

`.spec.tls[].match[]`

Type

object

Property	Type	Description
<code>destinationSubnets</code>	array	IPv4 or IPv6 ip addresses of destination with optional subnet.
<code>gateways</code>	array	Names of gateways where the rule should be applied.

Property	Type	Description
<code>port</code>	<code>integer</code>	Specifies the port on the host that is being addressed.
<code>sniHosts</code>	<code>array</code>	SNI (server name indicator) to match on.
<code>sourceLabels</code>	<code>object</code>	
<code>sourceNamespace</code>	<code>string</code>	Source namespace constraining the applicability of a rule to workloads in that namespace.

`.spec.tls[].match[].destinationSubnets`

Description

IPv4 or IPv6 ip addresses of destination with optional subnet.

Type

`array`

`.spec.tls[].match[].destinationSubnets[]`

Type

`string`

`.spec.tls[].match[].gateways`

Description

Names of gateways where the rule should be applied.

Type

`array`

`.spec.tls[].match[].gateways[]`

Type

`string`

`.spec.tls[].match[].sniHosts`

Description

SNI (server name indicator) to match on.

Type

`array`

`.spec.tls[].match[].sniHosts[]`

Type

`string`

`.spec.tls[].match[].sourceLabels`

Type

`object`

`.spec.tls[].route`

Description

The destination to which the connection should be forwarded to.

Type

`array`

`.spec.tls[].route[]`

Type

object

Property	Type	Description
<code>destination</code>	object	
<code>weight</code>	integer	Weight specifies the relative proportion of traffic to be forwarded to the destination.

`.spec.tls[].route[].destination`

Type

object

Property	Type	Description
<code>host</code>	string	The name of a service from the service registry.
<code>port</code>	object	Specifies the port on the host that is being addressed.
<code>subset</code>	string	The name of a subset within the service.

`.spec.tls[].route[].destination.port`

Description

Specifies the port on the host that is being addressed.

Type

object

Property	Type	Description
number	integer	

.status

Type

object

API Endpoints

The following API endpoints are available:

- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices`
 - **DELETE** : delete collection of VirtualService
 - **GET** : list objects of kind VirtualService
 - **POST** : create a new VirtualService
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices/{name}`
 - **DELETE** : delete the specified VirtualService
 - **GET** : read the specified VirtualService
 - **PATCH** : partially update the specified VirtualService
 - **PUT** : replace the specified VirtualService
- `/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices/{name}/status`
 - **GET** : read status of the specified VirtualService
 - **PATCH** : partially update status of the specified VirtualService

- **PUT** : replace status of the specified VirtualService

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices

HTTP method

DELETE

Description

delete collection of VirtualService

HTTP responses

HTTP code	Response body
200 - OK	Status schema
401 - Unauthorized	Empty

HTTP method

GET

Description

list objects of kind VirtualService

HTTP responses

HTTP code	Response body
200 - OK	VirtualServiceList schema
401 - Unauthorized	Empty

HTTP method

POST

Description

create a new VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>VirtualService</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>VirtualService</code> schema
201 - Created	<code>VirtualService</code> schema

HTTP code	Response body
202 - Accepted	<code>VirtualService</code> schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices/{name}

HTTP method

DELETE

Description

delete the specified VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized dryRun directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed

HTTP responses

HTTP code	Response body
200 - OK	<code>Status</code> ✓ schema
202 - Accepted	<code>Status</code> ✓ schema
401 - Unauthorized	Empty

HTTP method

GET

Description

read the specified VirtualService

HTTP responses

HTTP code	Response body
200 - OK	<code>VirtualService</code> schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update the specified VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are

Parameter	Type	Description
		present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>VirtualService</code> schema
401 - Unauthorized	Empty

HTTP method

PUT

Description

replace the specified VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a

Parameter	Type	Description
		BadRequest error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
body	VirtualService schema	application/json formatted

HTTP responses

HTTP code	Response body
200 - OK	VirtualService schema
201 - Created	VirtualService schema
401 - Unauthorized	Empty

/apis/networking.istio.io/v1alpha3/namespaces/{namespace}/virtualservices/{name}/status

HTTP method

GET

Description

read status of the specified VirtualService

HTTP responses

HTTP code	Response body
200 - OK	VirtualService schema
401 - Unauthorized	Empty

HTTP method

PATCH

Description

partially update status of the specified VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

HTTP responses

HTTP code	Response body
200 - OK	<code>VirtualService</code> schema
401 - Unauthorized	Empty

HTTP method

`PUT`

Description

replace status of the specified VirtualService

Query parameters

Parameter	Type	Description
<code>dryRun</code>	<code>string</code>	When present, indicates that modifications should not be persisted. An invalid or unrecognized <code>dryRun</code> directive will result in an error response and no further processing of the request. Valid values are: - All: all dry run stages will be processed
<code>fieldValidation</code>	<code>string</code>	<code>fieldValidation</code> instructs the server on how to handle objects in the request (POST/PUT/PATCH) containing unknown or duplicate fields. Valid values are: - Ignore: This will ignore any unknown fields that are silently dropped from the object, and will ignore all but the last duplicate field that the decoder encounters. This is the default behavior prior to v1.23. - Warn: This will send a warning via the standard warning response header for each unknown field that is dropped from the object, and for each duplicate field that is encountered. The request will still succeed if there are no other errors, and will only persist the last of any duplicate fields. This is the default in v1.23+ - Strict: This will fail the request with a <code>BadRequest</code> error if any unknown fields would be dropped from the object, or if any duplicate fields are present. The error returned from the server will contain all unknown and duplicate fields encountered.

Body parameters

Parameter	Type	Description
<code>body</code>	<code>VirtualService</code> schema	<code>application/json</code> formatted

HTTP responses

HTTP code	Response body
200 - OK	<code>VirtualService</code> schema
201 - Created	<code>VirtualService</code> schema
401 - Unauthorized	Empty