

**Documentation** Kubernetes Blog Training Partners Community Case Studies Versions ▼ English ▼

### KubeCon + CloudNativeCon 2024

Join us for three days of incredible opportunities to collaborate, learn and share with the cloud native community.

<u>Buy your ticket now! 12 - 15 November | Salt Lake City</u>





- Documentation
- Getting started
- Concepts
- ▶ Tasks
- ▶ Tutorials
- Reference

Glossary

- ▶ API Overview
- ► API Access Control
- Well-Known Labels, Annotatic and Taints

Kubernetes Documentation / Reference / Configuration APIs / kube-apiserver Audit Configuration (v1)

# **kube-apiserver Audit Configuration (v1)**

# Resource Types

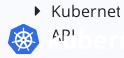
- Event
- EventList
- Policy
- PolicyList

#### **Event**

#### Appears in:

EventList

Event captures all the information that can be included in an API audit log.



- ▶ Instrume
- Kubernet Issues and Security
- ▶ Node

Field	Description
apiVersion etes alog Training Partners Community Case Studies string	audit.k8s.io/v1
kind string	Event
level [Required] Level	AuditLevel at which
<pre>auditID [Required] k8s.io/apimachinery/pkg/types.UID</pre>	Unique audit ID, ger request.
stage [Required] Stage	Stage of the reques event instance was
requestURI <b>[Required]</b> string	RequestURI is the rethe client to a serve
verb <b>[Required]</b> string	Verb is the kuberne with the request. For requests, this is the method.
<pre>user [Required] authentication/v1.UserInfo</pre>	Authenticated user
<pre>impersonatedUser authentication/v1.UserInfo</pre>	Impersonated user
sourceIPs []string	Source IPs, from whoriginated and intersource IPs are listed



- 1. X-Forwarded-F
- 2. X-Real-lp head X-Forwarded-F
- 3. The remote ac connection, if last IP in the list Forwarded-Fo but the last IP by the client.

userAgent string UserAgent records reported by the clie UserAgent is provic must not be trusted

objectRef
ObjectReference

Object reference th at. Does not apply f or non-resource re-

responseStatus

meta/v1.Status

The response statu when the Response type. For successful only include the CorFor non-status type will be auto-populat Message.

requestObject

k8s.io/apimachinery/pkg/runtime.Unknown

API object from the format. The Reques is in the request (pc JSON), prior to versi defaulting, admissic external versioned not be a valid objec



for non-resource re Request Level and h

#### responseObject

k8s.io/apimachinery/pkg/runtime.Unknown

API object returned JSON. The Response after conversion to serialized as JSON. (resource requests. Response Level.

#### requestReceivedTimestamp

meta/v1.MicroTime

Time the request re

#### stageTimestamp

meta/v1.MicroTime

Time the request restage.

#### annotations

map[string]string

Annotations is an u map stored with an be set by plugins in serving chain, include authorization and a that these annotation event, and do not cometadata.annotatic object. Keys should informing compone collisions (e.g. podsecuritypolicy.a Values should be shincluded in the Metalogical with an annotation of the metalogical compone collisions.

#### **EventList**



EventList is a list of audit Events.

Field	Description
apiVersion string	audit.k8s.io/v1
kind string	EventList
metadata meta/v1.ListMeta	No description provided.
<pre>items [Required] []Event</pre>	No description provided.

# Policy

#### Appears in:

PolicyList

Policy defines the configuration of audit logging, and the rules for how different request categories are logged.

Field	Description
apiVersion string	audit.k8s.io/v1
kind string	Policy
metadata meta/v1.ObjectMeta	ObjectMeta is included for interoperability with API infrastructure.



Refer to the Kubernetes API documentation for the fields of the metadata field.

#### rules [Required]

[]PolicyRule

Rules specify the audit Level a request should be recorded at. A request may match multiple rules, in which case the FIRST matching rule is used. The default audit level is None, but can be overridden by a catch-all rule at the end of the list. PolicyRules are strictly ordered.

#### omitStages

[]Stage

OmitStages is a list of stages for which no events are created. Note that this can also be specified per rule in which case the union of both are omitted.

# omitManagedFields bool

OmitManagedFields indicates whether to omit the managed fields of the request and response bodies from being written to the API audit log. This is used as a global default - a value of 'true' will omit the managed fileds, otherwise the managed fields will be included in the API audit log. Note that this can also be specified per rule in which case the value specified in a rule will override the global default.

## PolicyList

PolicyList is a list of audit Policies.

Field

Description



apiVersion string	audit.k8s.io/v1
kind string	PolicyList
metadata meta/v1.ListMeta	No description provided.
<pre>items [Required] []Policy</pre>	No description provided.

# GroupResources

#### Appears in:

PolicyRule

GroupResources represents resource kinds in an API group.

Field	Description
group string	Group is the name of the API group that contains the resources. The empty string represents the core API group.
resources []string	Resources is a list of resources this rule applies to.
	For example:
	<ul><li>pods matches pods.</li><li>pods/log matches the log subresource of pods.</li></ul>



- \* matches all resources and their subresources.
- pods/\* matches all subresources of pods.
- \*/scale matches all scale subresources.

If wildcard is present, the validation rule will ensure resources do not overlap with each other.

An empty list implies all resources and subresources in this API groups apply.

resourceNames
[]string

ResourceNames is a list of resource instance names that the policy matches. Using this field requires Resources to be specified. An empty list implies that every instance of the resource is matched.

#### Level

(Alias of string)

#### Appears in:

- Event
- PolicyRule

Level defines the amount of information logged during auditing

## ObjectReference

#### Appears in:



#### Event

ObjectReference contains enough information to let you inspect or modify the referred object.

Field	Description
resource string	No description provided.
namespace string	No description provided.
name string	No description provided.
<pre>uid k8s.io/apimachinery/pkg/types.UID</pre>	No description provided.
apiGroup string	APIGroup is the name of the API group that contains the referred object. The empty string represents the core API group.
apiVersion string	APIVersion is the version of the API group that contains the referred object.
resourceVersion string	No description provided.



subresource
string

No description provided.

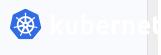
## PolicyRule

#### Appears in:

Policy

PolicyRule maps requests based off metadata to an audit Level. Requests must match the rules of every field (an intersection of rules).

Field	Description
level [Required] Level	The Level that requests matching this rule are recorded at.
users []string	The users (by authenticated user name) this rule applies to. An empty list implies every user.
userGroups []string	The user groups this rule applies to. A user is considered matching if it is a member of any of the UserGroups. An empty list implies every user group.
verbs []string	The verbs that match this rule. An empty list implies every verb.
resources []GroupResources	Resources that this rule matches. An empty list implies all kinds in all API groups.



# namespaces []string

Namespaces that this rule matches. The empty string "" matches non-namespaced resources. An empty list implies every namespace.

# nonResourceURLs []string

NonResourceURLs is a set of URL paths that should be audited. \* s are allowed, but only as the full, final step in the path. Examples:

- /metrics Log requests for apiserver metrics
- /healthz\* Log all health checks

# omitStages []Stage

OmitStages is a list of stages for which no events are created. Note that this can also be specified policy wide in which case the union of both are omitted. An empty list means no restrictions will apply.

# omitManagedFields bool

OmitManagedFields indicates whether to omit the managed fields of the request and response bodies from being written to the API audit log.

- a value of 'true' will drop the managed fields from the API audit log
- a value of 'false' indicates that the managed fileds should be included in the API audit log Note that the value, if specified, in this rule will override the global default If a value is not specified then the global default specified in Policy.OmitManagedFields will stand.



## Stage

(Alias of string)

#### Appears in:

- Event
- Policy
- PolicyRule

Stage defines the stages in request handling that audit events may be generated.

This page is automatically generated.

If you plan to report an issue with this page, mention that the page is auto-generated in your issue description. The fix may need to happen elsewhere in the Kubernetes project.

## Feedback

Was this page helpful?



No

Last modified August 19, 2024 at 4:39 PM PST: Update config API for v1.31 (f69f28fb6b)

**kube-apiserver Audit Configuration (v1) | Kubernetes -** 31/10/2024 09:01 https://kubernetes.io/docs/reference/configapi/apiserver-audit.v1/



© 2024 The Kubernetes Authors |



Documentation Distributed under CC BY 4.0 **Documentation Kubernetes Blog Training Partners Community** 

Case Studies Versions ▼ English ▼

© 2024 The Linux Foundation ®. All rights reserved. The Linux Foundation has registered trademarks and uses trademarks. For a list of trademarks of The Linux Foundation, please see our Trademark Usage page

ICP license: 京ICP备17074266号-3