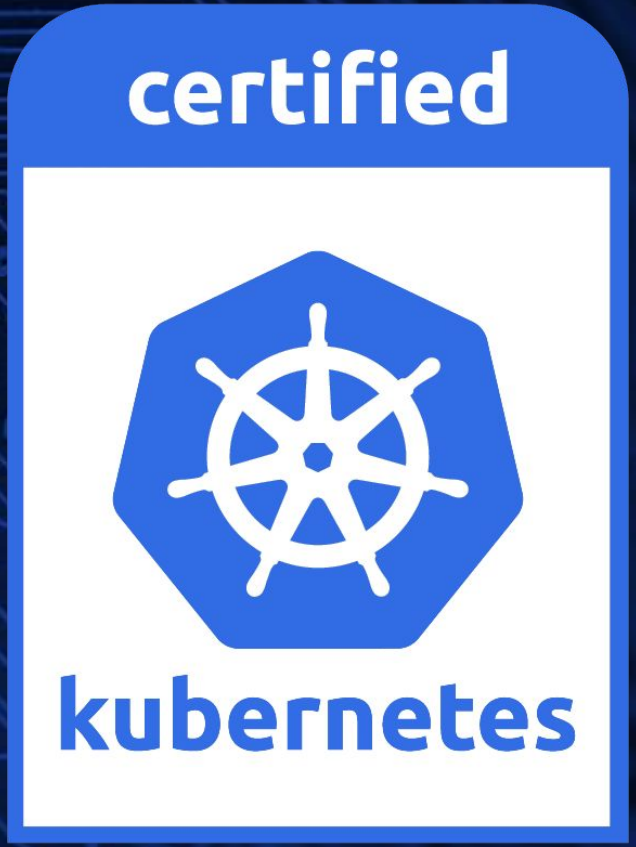
CKA/CKAD : Complete Certification Guide

Kubernetes - Authentication, Authorization, Admission Control



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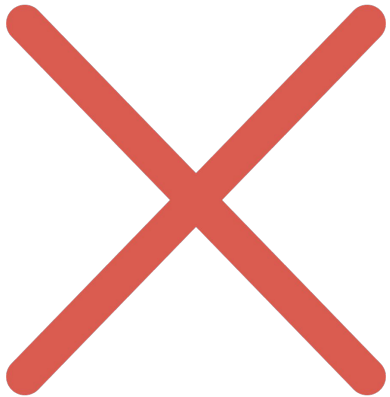
CKA/CKAD Certification

Authentication

Authorization

Admission Control

They all mean the Same?
Right



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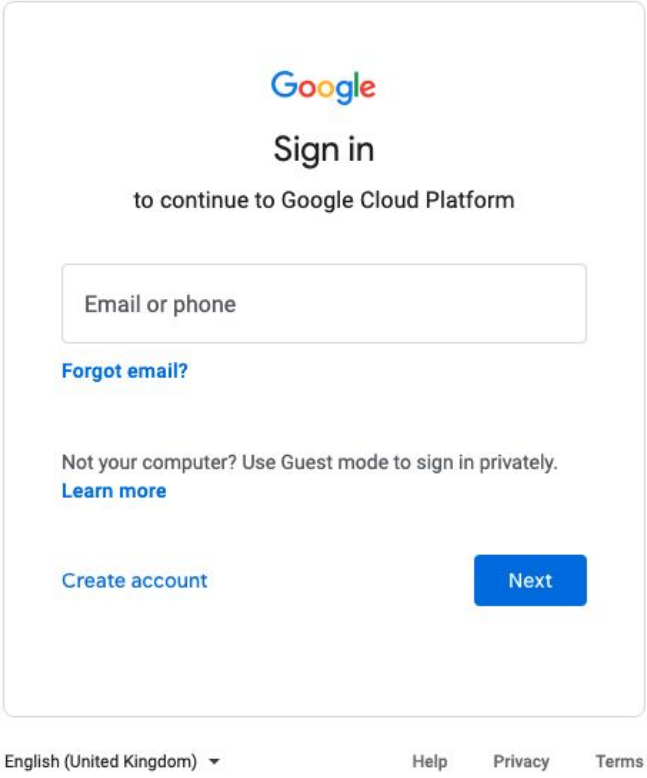
- **Authentication:**
- Identify and verify, who you are.

- x509 Certificates
- Bearer Tokens
- Username/Password
- LDAP/Oauth



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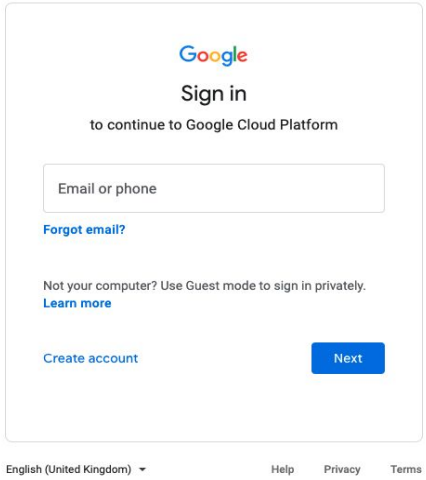
- **Authorization**

- Authentication process happens before Authorization.
- Authorization focus on level of privilege and permissions.



GCP IAM

Compute Engine Editor
Cloud Storage Viewer
GKE Admin

CKA/CKAD Certification

Identity	Authorization	
	Service	**Permission**
Mark	Cloud Storage	Editor
June	Compute Engine	Viewer
Alice	GKE Cloud Storage	Editor Admin
Peter	IAM	Create/Delete Users

- In Kubernetes Authorization Managed by the **RBAC** (Role-based access control).

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- **Admission Control :**

- Admission controllers are a powerful Kubernetes-native feature that helps to define and customize what is allowed to run on K8s cluster.

- Admission controller **intercepts** and **processes** requests to the Kubernetes API prior to persistence of the object, but after the request is authenticated and authorized.

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- **Power of Kubernetes admission controllers**

- Is the pod requesting too many resources?
- They can block pods from running if the cluster is out of resources or if the images are not secure.
- What is the priority of this deployment compared to the others?
- Which privileges are currently granted to the service account linked to these pods/deployments? Do they adhere to the principle of least privilege?

Thank You...

Don’t be the Same! Be Better!!!

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