

CERTIFIED KUBERNETES APPLICATION DEVELOPER (CKAD)



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AGENDA



- ❖ Why do you need an CKAD exam?
- ❖ Is the CKAD exam difficult?
- ❖ CKAD Exam prerequisites ?
- ❖ What are Exam Details ?
- ❖ What are Exam Resources ?
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- ❖ Necessary environment for Exam
- ❖ What Strategy need to follow to pass the Exam
- ❖ How do I register for the exam?



Why do you need an CKAD exam?

- Kubernetes is the future of infrastructure and almost every company is adopting nowadays. This is one of the most sought after skills that companies need right now.
- Almost every company is either converting their legacy applications into cloud-native apps or building new apps which are cloud-native. Kubernetes is the only container orchestration framework available in the market other than docker swarm when it comes to deployment of these apps.
- So, this is the right time for anyone to take this exam not only prove their expertise in this field but also strengthen your Kubernetes skills.

Is the CKAD exam difficult?



Yes, Kubernetes and passing the CKAD exam can be difficult. But with the right resources and time, any developer can get up to speed with Kubernetes and pass the CKAD exam.

CKAD Exam prerequisites ?

1.YAML/JSONknowledge: All Kubernetes objects can be created via YAML or JSON files. But YAML is widely used since its simple. So it is good to have YAML knowledge.

2.Linux Knowledge: For the ones who never worked on Linux based OS, it's highly recommended to take Beginners course of Linux, knowledge of networking in Linux is also required to some extent if you are going for CKAD.

3.Vim editor: While preparing for the exam, you will quite often need to create and modify files. If you are new to Vim, check below:

Practice Vim: <https://github.com/damassi/learn-vim>

Vim cheat sheet: <https://devhints.io/vim>

4.Docker Knowledge: As Kubernetes is a container orchestrator, before you start preparing for CKAD or CKA, having prior knowledge of docker is a must. If you are new to the container world, I'd advise you to take a course on one of the following learning portals: Udacity, Udemy, edX.

What are Exam Details?



- This exam is a performance-based exam, it doesn't have any multiple-choice questions.
- You will be given a set of performance-based problems to be solved in a command line and is expected to take approximately two hours to complete.
- You should solve **19 questions in 2 hours** and every question has a different weight.
- **The passing score for this exam is 66%.** The cost of this exam is **\$395 USD** and you will get one free retake and it is valid for 2 years. The exam includes questions from the following topics:

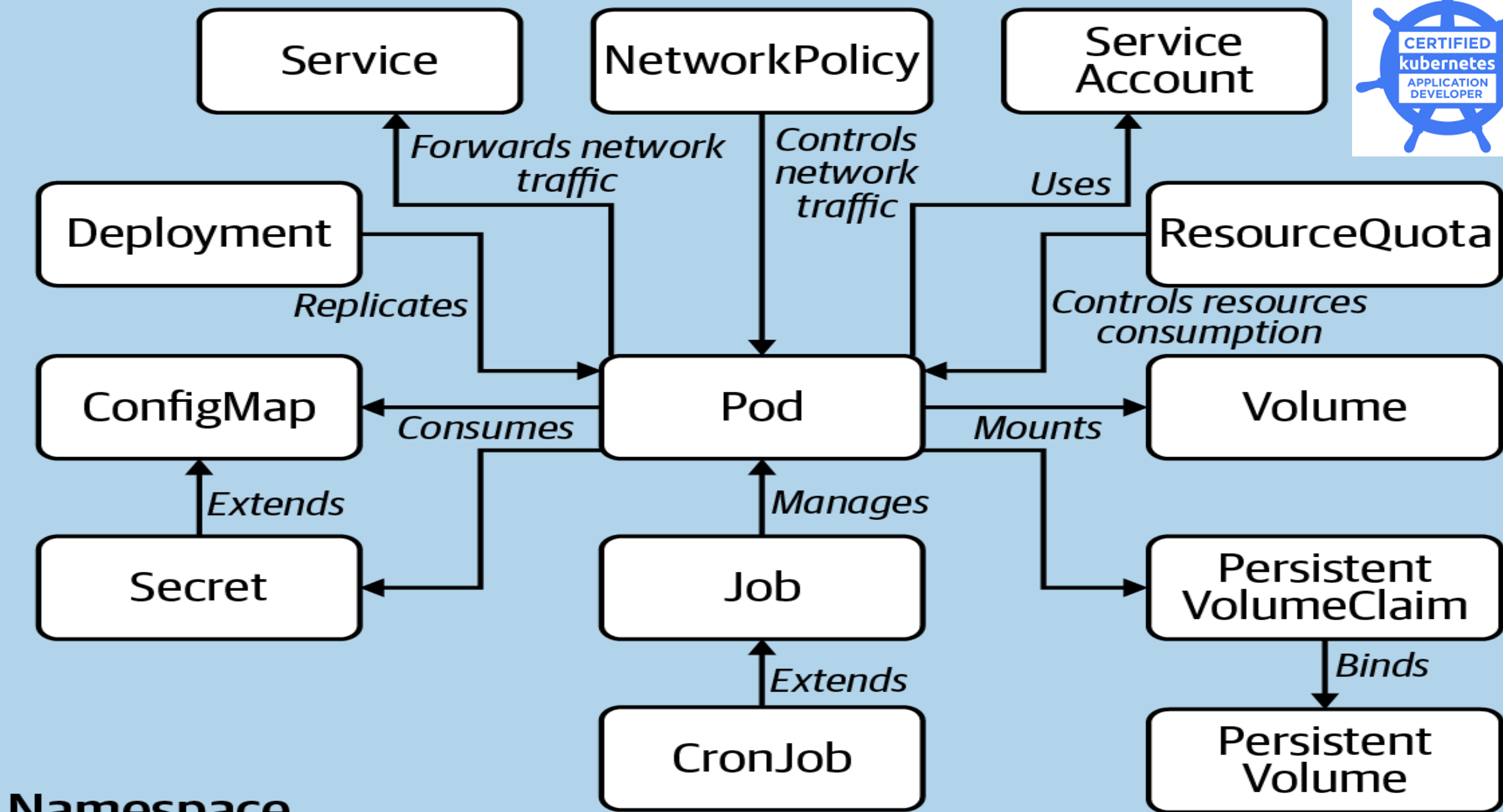


The exam includes questions from the following topics

- ❖ Core Concepts (13%)
- ❖ Configuration (18%)
- ❖ Multi-Container Pods (10%)
- ❖ Observability (18%)
- ❖ Pod Design (20%)
- ❖ Services & Networking (13%)
- ❖ State Persistence (8%)

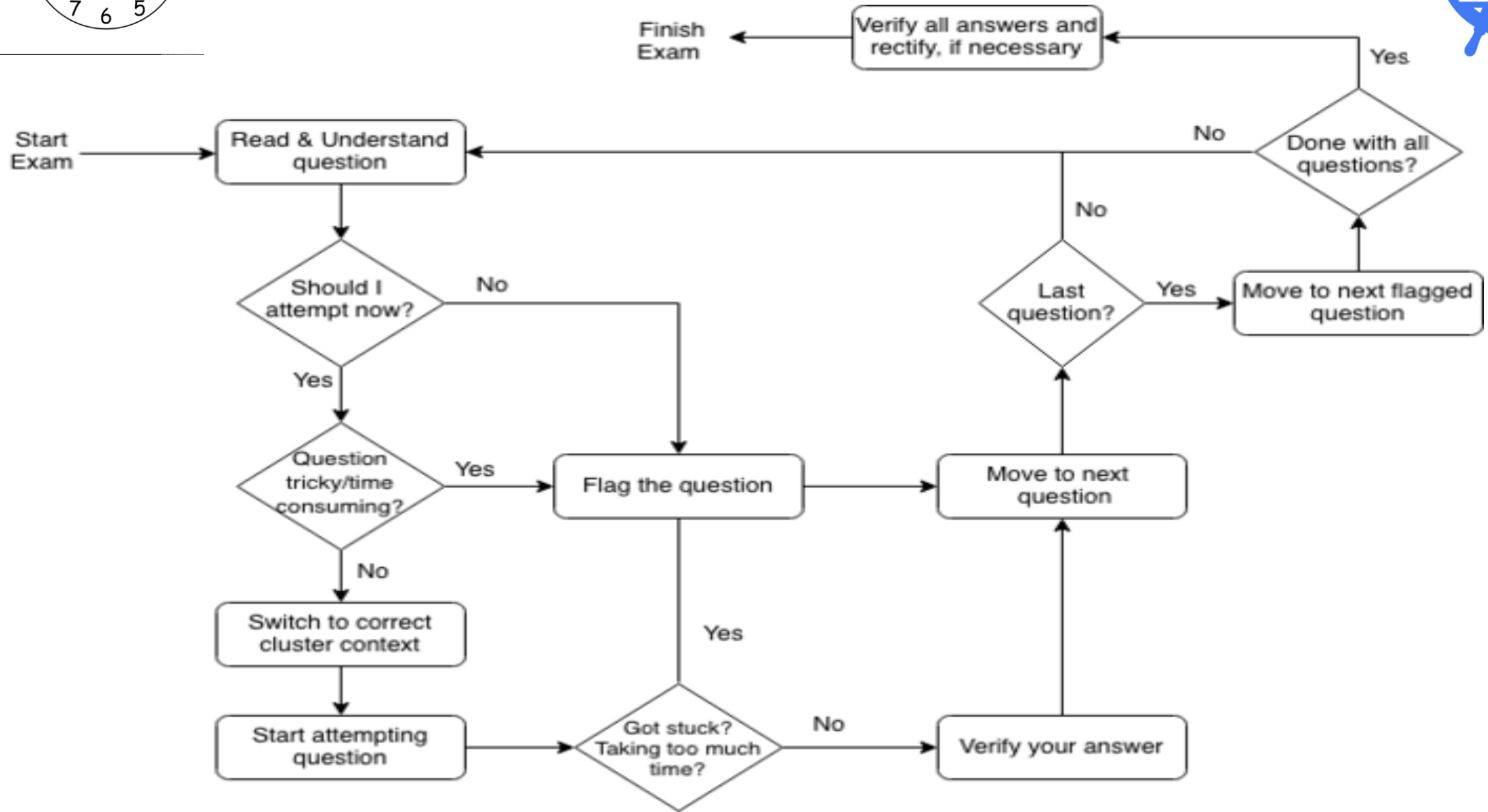
<https://github.com/dgkanatsios/CKAD-exercises>

<https://rudimartinsen.com/ckad-resources>





Time Management



CKAD Exam Resources



CKAD Kubernetes Developer Online Course

LinkedIn Learning (Free trial)	Kubernetes Dev. Cert. Preparation Exam Tips
Pluralsight	Learning Path: Developer Certificate Exam
Whizlabs	Kubernetes App Developer Course
Udemy	K8s Dev. Exam Preparation by Zeal Vora

Kubernetes App Developer Practice Test/Book

Udemy Practice Tests	Kubernetes Application Developer practice test
Amazon e-book (PDF)	Kubernetes Application Developer Study Guide

CKAD Kubernetes Developer Learning Materials

Linux Foundation Bootcamp	Cloud Engineer Bootcamp [24 weeks]
Coursera	Fundamentals of Kubernetes Deployment



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Kubernetes docs	https://kubernetes.io/docs/home/
Kubernetes.io tasks	https://kubernetes.io/docs/tasks/
kubectl cheatsheet	https://kubernetes.io/docs/reference/...
Kubernetes imperative commands	https://youtu.be/QOv26a-yaq8

E Learning Resources

Linux Foundation CKAD + Kubernetes for developers bundle -	https://training.linuxfoundation.org/...
Udemy Kubernetes Certified Application Developer (CKAD) with Tests	https://www.udemy.com/course/certifie...
kubectl cheatsheet	https://kubernetes.io/docs/reference/...
Kubernetes imperative commands	https://youtu.be/QOv26a-yaq8

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Github Repos

CKAD Exercises	https://github.com/dgkanatsios/CKAD-e...
CKAD resources	https://github.com/lucassha/CKAD-reso...
Nilesh Gule CKAD exam prep	https://github.com/NileshGule/ckad-ex...
Denny Zhang kubectl cheatsheet	https://github.com/dennyzhang/cheatsh...
Ahmet Alp Balkan Kubernetes network policy recipes	https://github.com/ahmetb/kubernetes-...



Blogs

Be fast with kubectl - <https://faun.pub/be-fast-with-kubectl...>

How to nail Kubernetes certification exams - <https://www.infoworld.com/article/363...>

Codefresh Kubernetes cheatsheet - <https://codefresh.io/kubernetes-tutor...>

CKAD practical challenge series - <https://codeburst.io/kubernetes-ckad-...>



❖ Practice Enough With These 150 Questions for the CKAD Exam

<https://link.medium.com/9TsVOAsF5tb>

❖ Kubernetes CKAD Example Exam Questions Practical Challenge Series

<https://link.medium.com/ddYQUpeQZtb>

❖ CKAD exam Preparation Notes and Practice Questions: Part 1

<https://link.medium.com/z6AB9fol8tb>

❖ CKAD exam Preparation Notes and Practice Questions: Part 2

<https://blog.prateekjain.dev/ckad-exam-preparation-notes-and-practice-questions-part-2>

❖ CKAD exam Preparation Notes and Practice Questions: Part 3

<https://link.medium.com/7KzqqQWH8tb>

CKAD Exam Practice Lab Setups



The best way to prepare is to practice a lot! The below setups will give you a Kubernetes cluster where you can do all the required practice. The exam expects you to solve problems on a live cluster.

CKAD does not have any MCQ-type format – so hands-on practice is a must.

- [Killercoda](#)
- [Minikube](#)
- [Kubernetes Setup using Kubeadm](#) [Detailed Guide]
- [Kubernetes Vagrant Setup using Kubeadm](#)
- [GKE Cluster](#) using free Google Cloud Credits
- [EKS Service on AWS](#) using Free tier program
- [AKS service on Azure](#) using free cloud credits
- Kubernetes Cluster on Digital Ocean[[Get \\$100 Digital Ocean Free Credits](#)]



Tips



1. Identification – before the exam, all candidates are supposed to present a photo identification that is issued by the government. In most cases, your international passport is sufficient. You can read the [Candidate Handbook](#) for more information.

2. Testing Room – for the test, you need to prepare a room. This room should be well-lit, private, and quiet.

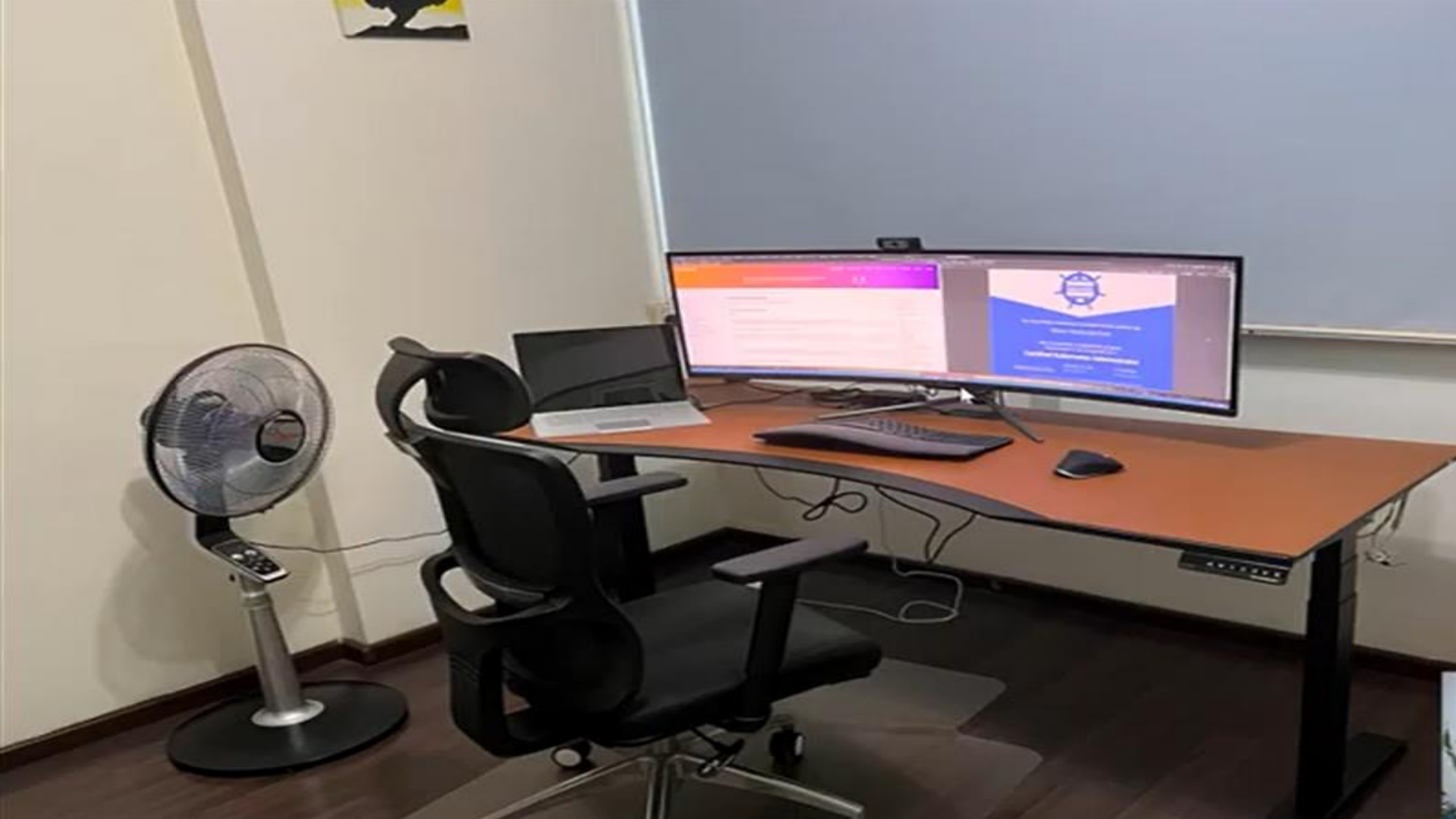
3. Virtual screen – tmux and screen is a virtual screen to get. The use of multiple monitors is going to be helpful to you. In such a situation, you can look up the Kubernetes resource state and log on to one screen while deploying Kubernetes resources on the other one.

4. Command aliases – to further reduce the time you require to type in commands, it is helpful to set up an alias or aliases.



5. Searchability – you can search and make use of the Kubernetes.io pages. Never give up when you do not have an idea on any of the exam questions. Search through the Kubernetes.io pages by typing some keywords and searching. On this website, you could get lucky with discovering some right answers or hints.

6. Manage your time well – avoid awkward questions. In other words, save your time and do not waste time on any questionable items. You can spend the remaining time you have on these difficult questions. However, it would be best if you endeavored to attempt all the easy questions first. To pass the exam, you do not have to beat everything. Passing the exam requires scores of at least 66% in the CKAD and at least 74% in the CKA.



Tips cont...



- **Imperative commands the best friend.**

Practice more and more with the kubernetes imperative commands rather than the declarative approach.

It always saves time and always helps you solve problems efficiently.

For more details on imperative commands and be fast with kubectl.

Be fast with Kubectl 1.18 (CKAD/CKA)

Collection of the fastest ways to create k8s resources using kubectl \geq 1.18 medium.com



CKAD Do's



- ❖ While giving practice exams, try to wrap up 15 minutes before the deadline – it will give you additional time to revise the solutions.
- ❖ Give a lot of practice exams, identify your weak topics and spend more time on those.
- ❖ On the exam day, keep an alternative internet source handy in case of Wi-Fi internet goes down. We don't want all our hard work to be wasted, do we?
- ❖ If any particular question is going to take more than 6-7 mins to solve, flag/mark it to solve for later and come back once you solve the rest.



CKAD Dont's



- ❖ Most people don't even use an alias. So no need to overwhelm yourself with an alias for everything.
- ❖ Don't give the exam on the last day. The idea is to give it in a pressure-free environment.
- ❖ At the time of the exam, you shouldn't have anything on the table other than your system.



- Practice, practice and practice.
- Make sure you practice all the topics and all the labs on the Kodecloud as shared by Mumshad Mannambeth's course.
- Whenever you get any question on any topic, just practice and learn it by doing.
- Look out for videos again if there is any confusion in mind.

Frequently asked Questions about CKAD Exam



Q1. Can we bookmark some links for use during the exam?

Yes, as long as you are using the links from official Kubernetes docs.

Q2. What if the internet connection goes down suddenly?

The exam software saves your progress at frequent intervals, so you won't lose all your work.

Q3. How many questions does the exam have?

Around 17–20 questions, based on the figures by multiple candidates.

Q4. Does each question carry equal weightage?

No, the weightage of questions varies from 2% to 13%.

Q5. How do we keep a track of time during the exam?

The exam software displays a timer on the top of the screen at all times.



I hope this helps everyone who is
looking to pass the exam.
Happy Learning!!!