

Tips for the Certified Kubernetes Administrator (CKA) Exam

Exam Details

- You can take the CKA certification exam from any qualifying computer, anywhere there is internet, almost any time. No need to go to a test center. (see Hardware Compatibility Check below)
- The online exam consists of a set of 24 performance-based items (problems) to be solved on the command line.
- The exam is expected to take 2-3 hours to complete.

What You Need For Your Exam

- Make sure your ID is ready for the exam. You may use any current, non-expired government ID that has your photo and full name in the Latin alphabet
- Exams are delivered online and closely monitored by proctors via webcam, audio, and remote screen viewing.
- Candidates must provide their own front-end hardware to take exams, including a computer with:
 - Chrome or Chromium browser
 - reliable internet access
 - webcam
 - microphone

Hardware Compatibility Check

- Candidates should run the compatibility check tool provided by the Exam Proctoring Partner to verify that their hardware meets the minimum requirements.
- The tool is located at https://www.examslocal.com/ScheduleExam/Home/CompatibilityCheck.

 Select "Linux Foundation" as the Exam Sponsor and "CKA" as the Exam.
- At this time, only Chrome and Chromium browsers are supported and candidates need a functioning webcam so that the proctor can see them.

Exam Results

- Results will be emailed 36 hours from the time that the exam was completed.
- Results will also be made available on My Portal.

Rules during exam

- Candidates may browse for and use technical documentation, including downloading and installing templates and other technical assets. An example of a good resource is, https://kubernetes.io/docs/reference/.
- Candidates are not allowed to access exam-specific assets, meaning those created by (or with
 the assistance of) those with prior exposure to the exam content and for the purpose of providing
 specific assistance to a candidate taking the CKA exam.
- Candidates may use the Notepad feature accessible in the top menu bar of the exam console (notes entered here will not be retained or accessible after the exam has ended)
- Candidates are not allowed scratch paper, food or beverages during the exam however, you may request a bathroom break or to get a drink (the exam timer keeps running).
- If you need food or beverage accommodations for medical purposes, please contact certificationsupport@cncf.io a minimum of 2 weeks before the date of your exam.
- Please see the <u>CKA Candidate Handbook</u> for additional information covering policies and procedures.
- Answers to Frequently Asked Questions (FAQ) can be found here
- If you cannot find an answer to your question in the Candidate Handbook or FAQ, you may contact Customer Support at certificationsupport@cncf.io

Technical Instructions

You may access these instructions at any time while taking the exam by typing 'man cka_exam'.

- 1. Root privileges can be obtained by running 'sudo -i'.
- 2. Rebooting of your server IS permitted at anytime.
- Do not stop or tamper with the gateone process as this will END YOUR EXAM SESSION.
- 4. Do not block incoming ports 8080/tcp, 4505/tcp and 4506/tcp. This includes firewall rules that are found within the distribution's default firewall configuration files as well as interactive firewall commands.
- 5. Use Ctrl+Alt+W instead of Ctrl+W.
 - 5.1. Ctrl+W is a keyboard shortcut that will close the current tab in Google Chrome.
- 6. Ctrl+C & and Ctrl+V are not supported in your exam terminal, nor is copy and pasting large amounts of text. To copy and paste limited amounts of text (1–2 lines) please use;
 - 6.1. For Linux: select text for copy and middle button for paste (or both left and right simultaneously if you have no middle button).
 - 6.2. For Mac: $\mathbb{H}+C$ to copy and $\mathbb{H}+V$ to paste.
 - 6.3. For Windows: Ctrl+Insert to copy and Shift+Insert to paste.
 - 6.4. In addition, you might find it helpful to use the Notepad (see top menu under 'Exam Controls') to manipulate text before pasting to the command line.
- 7. Installation of services and applications included in this exam may require modification of system security policies to successfully complete.
- 8. Only a single terminal console is available during the exam. Terminal multiplexers such as GNU Screen and tmux can be used to create virtual consoles.

General Notes

- The first exam item contains instructions and notes on the exam environment.
- Ensure you read this item thoroughly before commencing your exam.
- You can use the question navigation features to return to the first exam item at any time.

CKA Environment

- Each question on this exam must be completed on a designated cluster/configuration context.
- To minimize switching, the questions are grouped so that all questions on a given cluster appear consecutively.
- There are six clusters that comprise the exam environment, made up of varying numbers of containers, as follows:

Cluster	Members	CNI	Description
k8s	1 etcd, 1 master, 2 worker	flannel	k8s cluster
hk8s	1 etcd, 1 master, 2 worker	calico	k8s cluster
bk8s	1 etcd, 1 master, 1 worker	flannel	k8s cluster
wk8s	1 etcd, 1 master, 2 worker	flannel	k8s cluster
ek8s	1 etcd, 1 master, 2 worker	flannel	k8s cluster
ik8s	1 etcd, 1 master, 1 base node	loopback	k8s cluster - missing worker node

At the start of each question you'll be provided with the command to ensure you are on the correct cluster e.g.,

Set configuration context: \$ kubectl config use-context k8s

Nodes comprising each cluster can be reached via ssh, using a command such as the following:

\$ ssh k8s-node-0

Elevated privileges can be assumed on any node with the following command:

\$ sudo -i

When you have finished working on a node, you should return to the base node (with hostname *node-1*) before attempting any further questions. Nested–*ssh* is not supported.

You can use *kubectl* and the appropriate context to work on any cluster from the base node. When connected to a cluster member via *ssh*, you will only be able to work on that particular cluster via *kubectl*.

Further instructions for connecting to cluster nodes will be provided in the appropriate questions, and certain hints may be provided where required on specific items.

Important Considerations

- 1. The environment is currently running Kubernetes v1.9.1.
- You are free to search for exam-relevant documentation on the Internet at any time during the
 exam, in a separate browser tab. Please note, that your exam session is being monitored live,
 and recorded, and can be reviewed after the exam has been completed.