



## Exam Tips for Certified Hyperledger Fabric Administrator (CHFA)

### Exam Details

- You can take the CHFA 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 exams consists of a set of performance-based items (problems) to be solved on the command line. CHFA exam consists of 16 problems.
- Candidates are allowed 2 hours to complete an Exam.

### 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 “CHFA” 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.

### Resources allowed during exam

- Candidates may use their Chrome or Chromium browser to open one additional tab in order to access assets at <https://hyperledger-fabric.readthedocs.io/en/release-1.3/> and its subdomains, and <https://hyperledger-fabric-ca.readthedocs.io/en/release-1.3/> and its subdomains. No other tabs may be opened and no other sites may be navigated to. *The allowed site above may contain links that point to external sites. It is the responsibility of the candidate not to click on any links that cause them to navigate to a domain that is not allowed.*
- Please see the [Candidate Handbook](#) for additional information covering policies, procedures and rules during the exam..
- 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@hyperledger.org](mailto:certificationsupport@hyperledger.org).

## Technical Instructions

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

1. Root privileges can be obtained by running 'sudo -i'.
2. You should avoid rebooting node-1, as the supporting infrastructure will take around 15 minutes to start, and stabilize. You are free to reboot any node other than node-1 at any time.
3. Do not stop or tamper with the certerminal or sshd configuration and process on node-1 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.  
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;  
For Linux: select text for copy and middle button for paste (or both left and right simultaneously if you have no middle button).  
For Mac: ⌘+C to copy and ⌘+V to paste.  
For Windows: Ctrl+Insert to copy and Shift+Insert to paste.
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.
9. To change font size in the terminal please use the native Chrome keys: Ctrl and '+' or Ctrl and '-'.
10. You should avoid changing the locale of the system during your exam.
11. You should not manipulate the firewall of node-1, or tamper with any of the running lxd or dnsmasq processes.

## 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.
- The exam is based on Fabric v1.3.0

## CHFA Environment

- Each question on this exam must be completed on a designated Fabric node, most of which run Fabric under `docker/docker-compose`.
- *Most* of the networks are based off of `byfn` with configuration files located under `/srv/fabric-samples`, unless otherwise noted in the question text.
- At the start of each question, you will be directed to which Fabric node you should `ssh` to in order to complete the item.
- You can `ssh` to a Fabric node with a command such as:  

```
ssh fabadm@<node>
```
- The `fabadm` user should be used for all items, unless otherwise indicated.
- You can assume elevated privileges on any node by issuing the following command:  

```
sudo -i
```
- You can also use `sudo` to execute commands with elevated privileges at any time.
- You should return to the base node (hostname `node-1`) after completing each item.
- Further instructions for connecting to nodes will be provided in the appropriate questions, and certain hints may be provided where required on specific items.