LPI DevOps Tools Engineer Certification

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version 20250930

\$ id

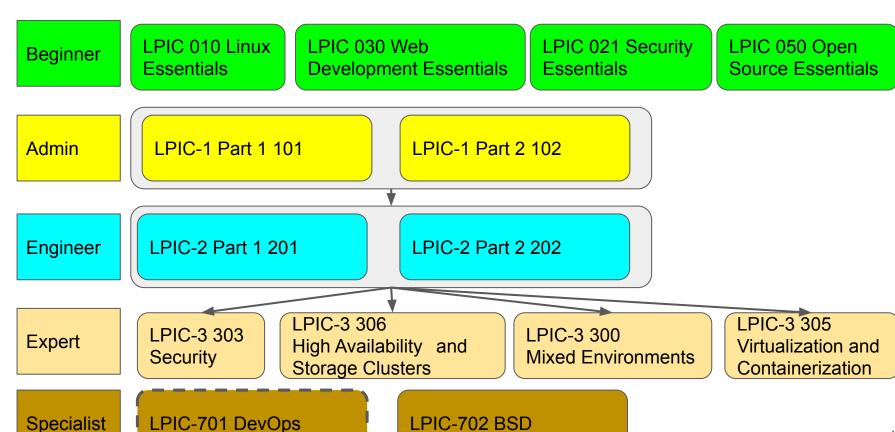
- Born in Neuss (Germany) 1957.
- Located in Berlin (Germany) since 1984.
- First experience with Unix in 1988.
- Works with Linux since 1998, special topic mobile devices.
- Freelance Linux trainer since 2015 <u>LPI Approved Trainer</u>.

\$ cat /etc/motd

- 1. Which Linux Professional Institute LPI certifications are available?
- 2. What is DevOps?
- 3. What are the objectives of the LPIC 701-200 DevOps Tools Engineer exam?
- 4. How and where to take the exam?
- 5. Which questions are provided in the exam (fictitious examples)?
- 6. How to prepare for the exam?
- 7. Questions & Answers!

Disclaimer: this presentation is not officially provided by LPI.

LPI Certifications



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What is DevOps?

"DevOps is a set of practices that combines software development (Dev) and IT operations (Ops). It aims to shorten the systems development life cycle and provide continuous delivery with high software quality.[1]

DevOps is complementary to <u>agile software development</u>; several DevOps aspects came from the <u>agile</u> way of working."

source: https://en.wikipedia.org/wiki/DevOps yellow marks by WH

LPI 701-200 DevOps Tools Engineer Objectives

Objectives 2.0 (aka 701-200) officially available at the beginning of 2026.

https://wiki.lpi.org/wiki/DevOps Tools Engineer Objectives V2.0

Overview – DevOps Exam Objectives

total weight 60

20
13
13
14

source: https://wiki.lpi.org/wiki/DevOps Tools Engineer Objectives V2.0

Topic 701: Software Engineering (weight 20)

- 701.1 Modern Software Development
- 701.2 Standard Components and Platforms for Software
- 701.3 Source Code Management
- 701.4 Continuous Integration and Continuous Delivery
- 701.5 Software Composition, Licensing and Open Source

Rest API, SOA, Microservices ... – XaaS, databases, CDN ... – git ... – Jenkins ... – FOSS licensing, SBOM ...

Topic 702: Application Container (weight 13)

702.1 Application Container Management

702.2 Container Orchestration

702.3 Container Image Building

docker, podman ... – docker compose, podman compose, ... – docker image, Dockerfile, Docker registry ...

Topic 703: Kubernetes (weight 13)

703.1 Kubernetes Architecture and Usage

703.2 Basic Kubernetes Operations

703.3 Kubernetes Package Management

control node, worker node, kubectl, .. – Pods, ReplicaSets, Deployments, Services, ConfigMaps, ... – helm charts ...

Topic 704: Configuration Management (weight 14)

704.1 Cloud Native Security

704.2 Prometheus Monitoring

704.3 Log Management and Analysis

704.4 Tracing

service exploits, brute force attacks, XSS, ... – metrics, PromQL, common exporters, ... – ELK, Grafana – Open Telemetry, Jaeger, ...

Exam Details

duration: 90 minutes (60 questions)

• costs: approximately 200 Euro (25% off for LPI members)

• languages: English, Japanese

• **locations**: online – <u>Pearson VUE</u> test centers – Linux events (reduced fee)

• valid: 5 years

• passing score: 800 points max. – 500 points to get the certificate (62,5%)

Requirements for a Successful Exam

- Some years of experience with Linux and DevOps.
- <u>LPIC-1</u> certification is recommend but not mandatory.
- Intensive study of the topics mentioned in the learning objectives.
- At least three months preparation time.

How to Prepare for the Exam?

self-paced learning:

official LPI learning material:

self-organized study groups:

<u>LPI training partners</u>:

brain dumps:

books *), videos, articles

to be released ~ 01/2026

recommended

expensive

not recommended

^{*)} see <u>bibliography</u> at the end

Example Exam Question I (fictitious)

Which command updates changes from inside a local git repository to a remote git repository?

- A. git remote
- B. git push
- C. git send
- D. git clone

Example Exam Question I (answer)

answer: B

This in an example of a multiple-choice-question (around 50 questions of 60).

\$ <u>man git-push</u>

Example Exam Question II (fictitious)

How to view a list of all installed **helm** plugins? Please specify the complete command including subcommands:

Example Exam Question II (answer)

answer:

helm plugin list

This is an example of a fill-in-the-blank question (around 10 questions of 60).

https://helm.sh/docs/intro/cheatsheet/

Why Get a Certification? Career Impact

- Companies require certifications for there own validation processes.
- A milestone to a better salary.
- Certifications provide kind of a ticket to get a job interview.
- Certification objectives provide a means to focus on relevant stuff to study.

https://www.heise.de/news/IT-Weiterbildung-Der-permanente-Fortbildungsdruck-6130906.html 2021 (in German)

https://www.lpi.org/value-of-certification/linux-professionals/ 2020

https://www.lpi.org/de/articles/2025-open-source-professionals-job-survey-report-available-now/ 2025

Career Opportunities with DevOps Certifications

Example job search with keywords: **devops** + **engineer** + **linux**

https://www.stepstone.de/jobs/devops-engineer-linux

293 results – Germany – 09/2025

https://it.expertini.com/jobs/search/devops-engineer-linux-jobs-italy/?operator=and

115+ results – Italy – 09/2025

Open Source Job Hub

"Find your place in the open source ecosystem:"

https://opensourcejobhub.com/

An international job search engine.

Where are the Slides?

https://bit.ly/3NdswgC



\$ echo "??????"

__END__

Thank You

- <u>Tuebix</u> Tübingen (Germany) 2023
- <u>SFScon</u> Bolzano (Italy) 2025

Bibliography

Mohamed Labouardy: Pipeline As Code: Continuous Delivery with Jenkins, Kubernetes, and Terraform; 2021

Scott Chacon / Ben Straub: Pro Git 2014; CC license

Nigel Poulton: Docker Deep Dive; 2025

Kelsey Hightower: Kubernetes the Hard Way; 2025; CC license

<u>James Turnbull: Monitoring with Prometheus</u>; 2018

James Turnbull: The LogStash Book (Elasticsearch, Logstash & Kibana - ELK); 2013

Hint: for many topics there is **official** and **free** documentation available.

Abstract

The lecture describes how to prepare for the Linux Professional Institute - LPI Exam 701-200: DevOps Tools Engineer. The certification is vendor-neutral and offers globally recognized credentials for DevOps engineers, sysadmins and developers. Topics of the lecture include: Which other LPI certifications are available? – What are the learning objectives of the exam? – How does the exam work? – What do the exam questions look like (fictitious example questions)? – How can you prepare for the exam?

No previous knowledge is required for the lecture. Though a LPIC-1 Linux certification is recommended (e.g. basic command line and network knowledge). Some practical experience with Linux in the DevOps area is also recommended.



About the Author

Werner Heuser studied administrative science at the Duisburg University of Applied Sciences for Administrative Sciences. After completing his studies in 1978, he worked in the cultural office of the city of Duisburg and in the administration of various hospitals in Berlin. This was followed by several years as a software consultant for payroll systems. In 1997 he started a web portal about Linux with mobile computers. From 1999 he sold laptops, notebooks and PDAs with Linux pre-installed. Since 2015 he is working as a freelance lecturer for topics related to Linux. His specialty as <u>LPI Approved Trainer</u> are courses to prepare for the Linux Professional Institute (LPI) exams. After a brief detour via SuSE Linux, he has stayed with Debian GNU/Linux since version 2.0 Hamm. His personal "Powershell" is called zsh. He lives, works and dances Tango Argentino in Berlin (Germany). You can reach the author via LinkedIN or XING.