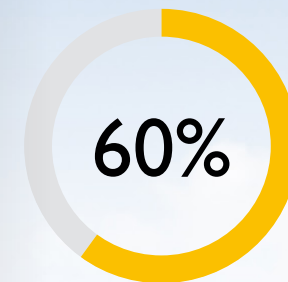Linux
Professional
Institute
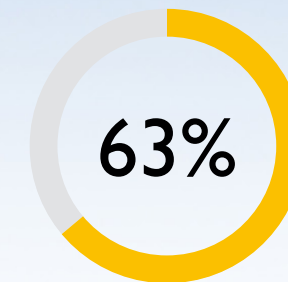
2022

Annual
Review

60%

60% of IT hiring managers surveyed say applicants with IT certifications are significantly more likely to be reviewed.

- Pearson VUE Value of
IT Certification Report 2021

63%

63% feel that IT certification significantly increases employee work efficiency.
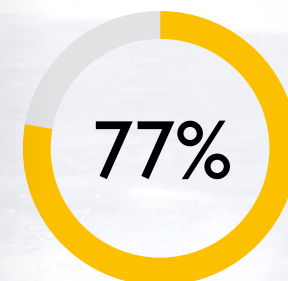
- Pearson VUE Value of
IT Certification Report 2021

The certifications that gained the most value over the past three months in the sysadmin space were all Linux-related: LPIC-2, LPIC-3, and Red Hat Certified Systems Administrator.

- Foote Research Group
IT Skill Certs Pay Data Trend 2021

80%
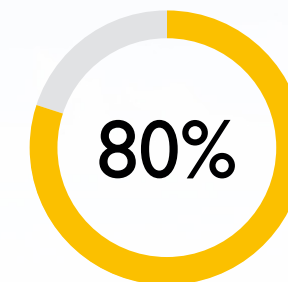
80% of employers now report that they provide online training courses for employees to learn open source software.

- Open Source Jobs Report 2020

77%

77% of those who were certified received a pay increase within 6 months.

- Pearson VUE Value of
IT Certification Report 2021

94%
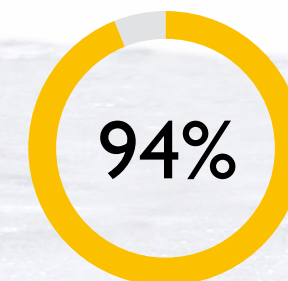
94% of decision makers worldwide said certified team members provide added value above and beyond the cost of certification.

- Pearson VUE Value of IT Certification
Employer Report 2021

lpi.org

Foreword

A year has gone past since the last Annual General Meeting (AGM).

In the election last year one of our Founding Board Members (Chuck Mead) retired and another Founding Board Member (Evan Leibovitch) joined the staff in a full-time position. This year two more long-term Board Members (Torsten Scheck and Bryan J. Smith) leave the Board, although Bryan serves LPI in other ways.

The Board formed an Executive Board that will handle issues not needing a Board Resolution from the entire Board, and Sub-Committees that will develop concepts and present them to the full Board.

Hopefully this election cycle will bring more fresh minds with ideas on how to improve LPI, but we should not allow this to happen by chance. Therefore one of the efforts that the Board is pursuing is an active Diversity Policy that will, over time, work toward making a Board, NomCom, Staff and Membership fit that of the world community, and not just the "Open Source" community.

It has long been a philosophy of mine that if you leave out people because of some attribute that has nothing to do with their ability to do computing then you are hurting not only yourself, but computer science in general. You are not getting the best, just the people with which you feel most comfortable.

We need the best, and therefore I ask that in this coming year you reach out to find people who can make Open Source the best. Get them involved with our community, and hopefully in the future they will become an Open Source Professional and a member of LPI, and then (perhaps) a member of the LPI Board or Staff. Likewise I encourage members to consider running for the Board and to lend your ideas, expertise and considerations to Board decisions.

Last year I ended this message with the words: "Perhaps it will be you writing this forward some day." This is not my organization. It is our organization.

Pax Vobiscum,

Jon 'maddog' Hall
Chairman of the Board
Linux Professional Institute

Foreword
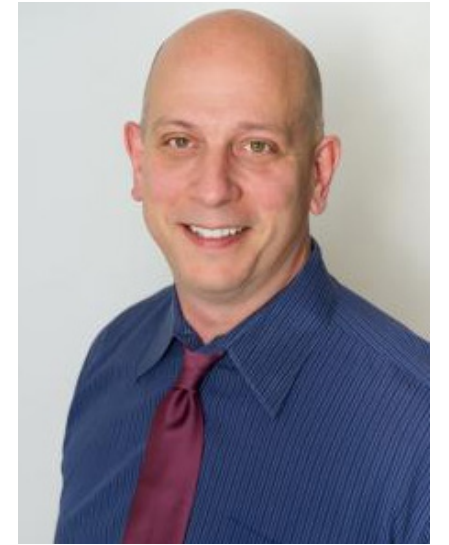
Welcome to the 2022 Annual Review for the Linux Professional Institute (LPI). This review represents a snapshot of our activities and accomplishments as we, the LPI community, volunteers, partners, and staff, cooperate and collaborate in furthering our shared interest in LPI's mission to "promote the use of open source by supporting the people who work with it".

As the 2022 Annual General Meeting (AGM) date approaches, we're completing our first year with a full complement of Board members who were solely elected by LPI certification holders that have chosen to become formal Members. Things seem to be going well and, during this year's AGM, Members will be electing three board positions to replace those directors whose term is ending.

We're also continuing the development of the Essentials program with the release of the Web Development Essentials certificate and Learning Materials. Expect to see more Essentials level topics being released soon, too.

As always, there are numerous volunteer and partnering programs available to anyone interested in using, teaching, or advocating for the adoption of open source. If you have a local project with goals that are compatible with LPI's missions and code of ethics, reach out and let us know. Perhaps we can help.

It takes the considerable efforts of the dedicated staff and Board members at LPI, as well as many exceptional volunteers from around the world, to create and maintain the high quality, utility, and availability of our programs. On behalf everyone that you have helped, thank you.

Thanks for reading this review and feel free to let us know how we're doing. Take care,

G. Matthew Rice

Executive Director
Linux Professional Institute

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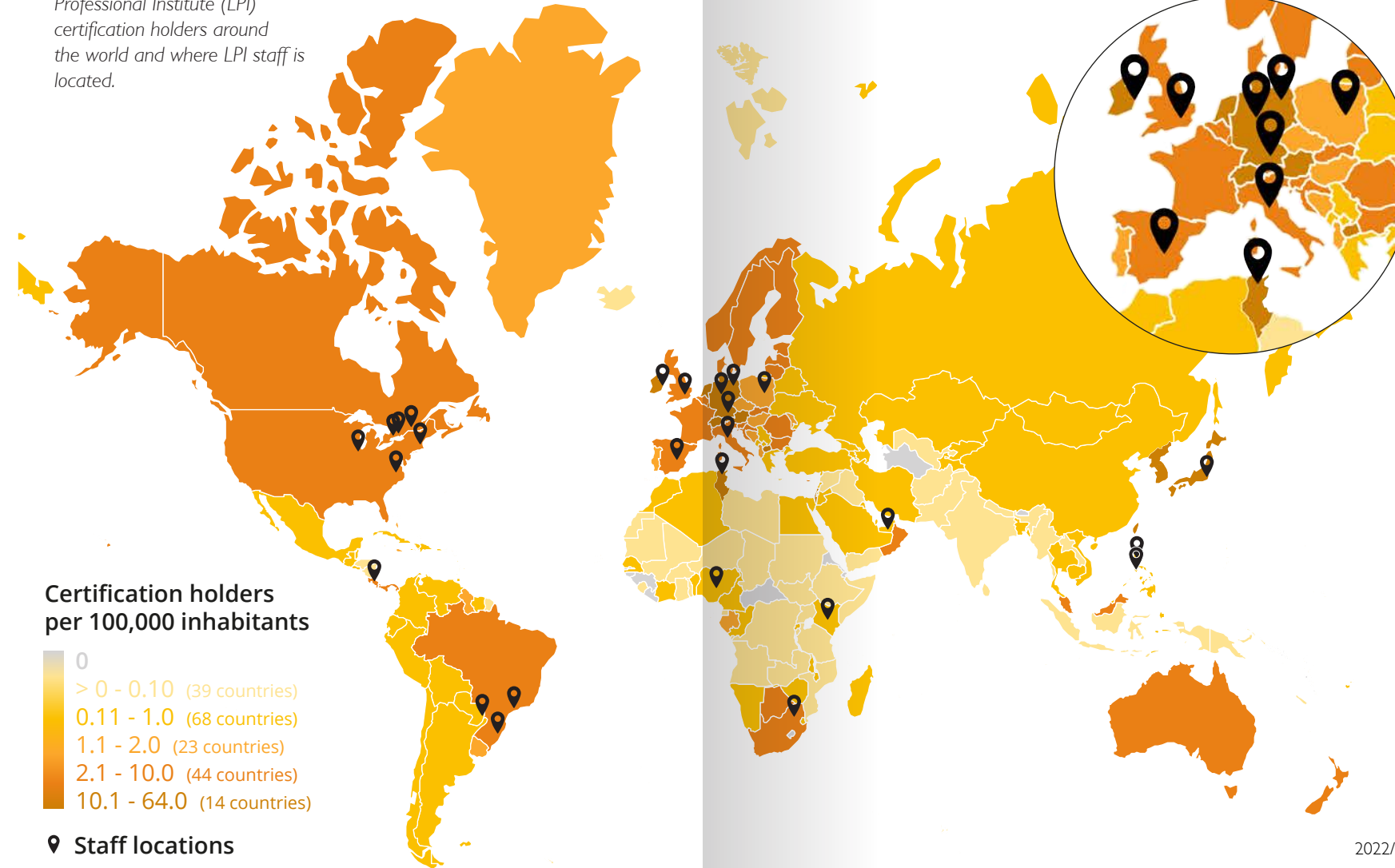## Turning passion into profession for more than 20 years

Linux Professional Institute (LPI) is committed to addressing the needs of the professionals, community members, and users who have turned to open source technologies as the basis for their day-to-day lives. LPI seeks to support those who seek employment, education, and entrepreneurship working with open source technologies.

LPI sets itself apart from most IT certifications by emphasizing the needs of the people of open source. Committed to our members and community, we uphold these values by staying:

- **Accessible** by making our exams available around the world, in multiple languages, at prices adjusted to the relative ability to pay in different countries. Early 2022 saw the cost of LPI exams drop in 145 regions, fitted to the Inequality-adjusted Human Development Index. This helps improve accessibility in IT careers around the world, for the regions that need it most.

- **Neutral** regarding Linux vendors, distributions, and methods of training. This extends to our international projects and initiatives: in 2021, LPI helped two young professionals explore cutting-edge open source technologies like cryptocurrency and NFTs, inviting community members to share their own thoughts and think critically on related issues.

- **Relevant** by listening to our global community. Our certification programs are continually being redesigned in order to meet the needs of open source professionals. In 2021- 2022, LPI re-released the highest-level, vendor-neutral Linux certification available. Learning Materials and Certification for Web Development Essentials were released and translated into multiple languages, creating a path to study and certify skills in an increasingly relevant area of software development.

In 2021, our commitment to supporting the people of open source took the form of a new internal team, as Community and Membership Services were expanded into "Peopling".

Overview of the density of Linux Professional Institute (LPI) certification holders around the world and where LPI staff is located.

Certification holders per 100,000 inhabitants

- 0
- > 0 - 0.10 (39 countries)
- 0.11 - 1.0 (68 countries)
- 1.1 - 2.0 (23 countries)
- 2.1 - 10.0 (44 countries)
- 10.1 - 64.0 (14 countries)

📍 **Staff locations**

2022/06

"Peopling" means dedication to researching, planning, and implementing new projects to better support you, a valuable member of the open source community. The Peopling team currently focuses on the five initiatives:

- **Linux Clubs:** Facilitating open source learning within communities and schools.

- **Member Services:** Supporting the journey of LPI members from open source aficionados to well-rounded, globally-minded business professionals.

- **Incentives:** Encouraging the success of open source businesses, organizations, and projects.

- **Champions:** Developing international volunteers, advocates, and ambassadors as international representatives to promote open source.

- **Know Your Community:** Researching and implementing projects that support the needs of open source users around the world.

We look forward to this next stage of LPI, and the new achievements "Peopling" can bring to professionals and community members.

"Thanks to LPI I was able to come closer to the community and contribute, so that communication was not a barrier between knowledge and the public in Brazil, especially those starting their careers in ICT."
Read her story ...

Elayne Lemos, Brazil
DevOps Specialist at Sysvale

Certifications

Linux and open source certifications provide a tangible measurement to employers of knowledge and capability, allowing professionals to stand out against other job applicants and receive fair compensation for their valuable skill sets. For self-employed Linux and open source professionals, certification clearly signals knowledge and professionalism to clients. Becoming certified can improve upon existing skills and create a more thorough understanding of Linux. Linux Professional Institute offers vendor-neutral Linux certification, BSD certification, and open source certification.
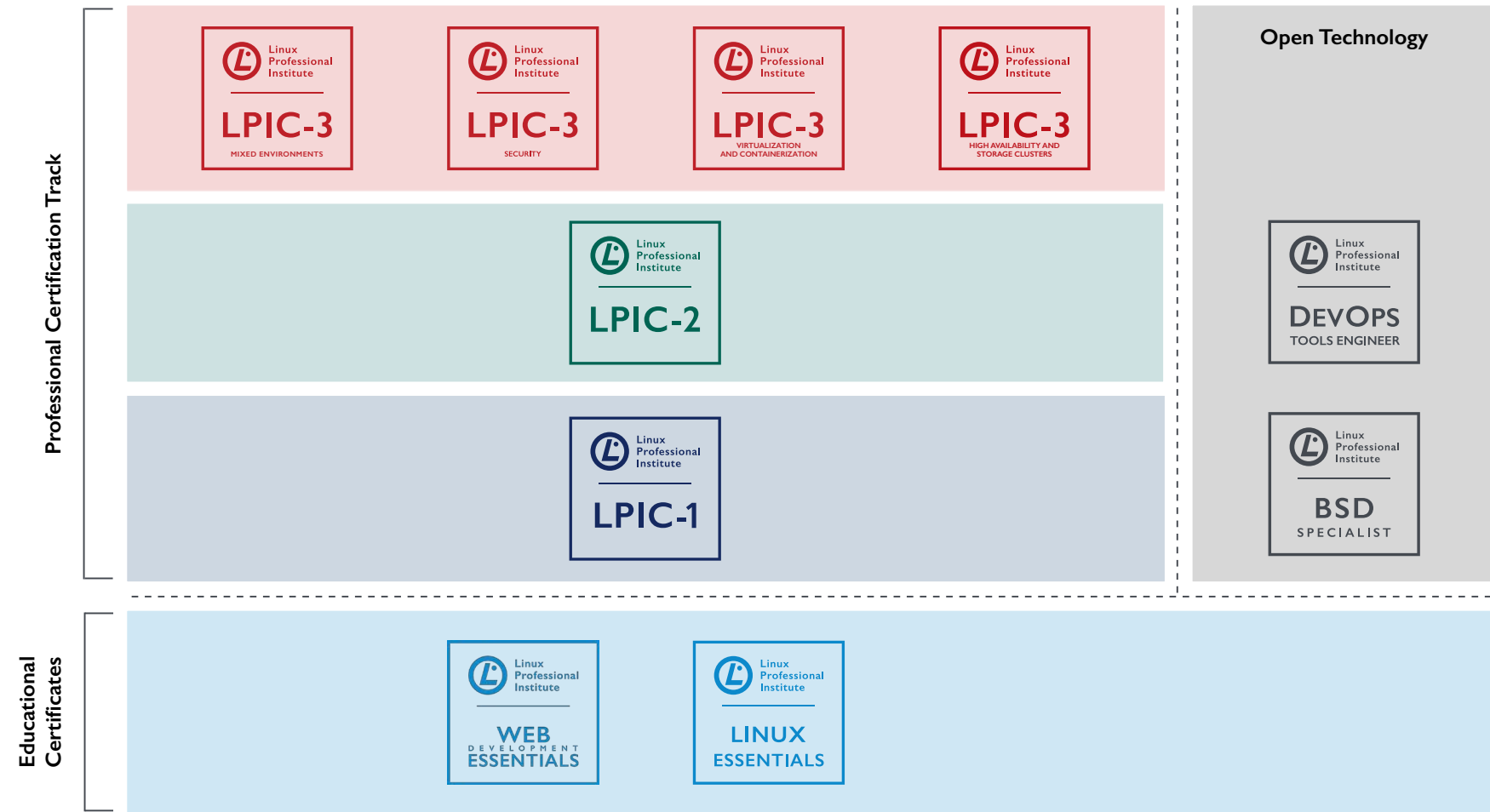
LPIC-3 Version 3.0

In 2021, Linux Professional Institute (LPI) updated the entire LPIC-3 certification track to version 3.0. Beta testing began and finalized in late Q1, with all LPIC-3 exams undergoing significant changes.

Updates to LPIC-300 and LPIC-303 were completed in Q2 of 2021, with translations available in English and Japanese. LPIC-305 (Virtualization and Containerization) and LPIC-306 (High Availability and Storage Clusters), are new exams which replaced LPIC-304 (Virtualization and High Availability). This update allows exam candidates to become certified in new areas of cutting-edge Linux technologies, with exam objectives grouped into more closely related certifications for Linux skill specialization and mastery.

Old exam versions remained available for six months after the release their newer version to allow preparing candidates to transition gradually to new exam objectives.

For more information on recent updates to LPIC-3, visit:
https://www.lpi.org/LPIC-3-version-3-update

Translations

In 2021 and 2022, Linux Professional Institute (LPI) LPIC-3 and DevOps certifications were made available in Japanese. LPI will continue to translate exams in 2022, contuing our goal of supporting the people who work with open source software, around the world.

New Essentials Certificates

New Essentials certificates are in development. Objective and exam planning has begun for Security Essentials and IoT Essentials.

"Thanks to the localization process I got to learn a lot more about command line tools and I've even incorporated some of this new knowledge to my other jobs."
Read her story ...

Julia Vidile, France
Ghostwriter and Copywriter,
Learning Materials Author and Translator

Web Development Essentials

Linux Professional Institute released its latest exam in the Essentials series, Web Development Essentials (WDE), in Q1 of 2022. While LPI exams have previously focused on fields such as System Administration, Security and Virtualization, WDE steps forward to engage an entire new community. Because web development is accesible as a first step into computing for non-technical audiences, this exam supports not only the open source community by attracting new members, but anyone interested in learning more about the field of technology.

Software development is the major field in computer science next to system administration, and for many, languages used in web development and the WDE exams (such as HTML, Javascript, and CSS) are the first forays into the industry, laying the foundation for greater knowledge of programming.

As the fields of software development merge more and more with classical knowledge in IT, software becomes more important in all areas of our day-to-day lives. Understanding the basics of WDE is relevant, not only to enter the world of professional computing, but to understand the Internet-related tools and technology that accompany you wherever you go in the world. WDE allows LPI to cover more exam territory than ever before, stepping out toward a comprehensive coverage of the field of open source ICT.

Exam code: 030-100 (Version 1.0)
Prerequisites: None, anyone can take the exam
Exam format: 40 questions/60 minutes
Validity period: Lifetime
More information: lpi.org/wde

Exam topics

031: Software Development and Web Technologies
032: HTML Document Markup
033: CSS Content Styling
034: JavaScript Programming
035: Node.js Server Programming

"Modern applications are usually delivered on the Web. That is why LPI decided to teach and test software development with a focus on Web technologies. That is also why we have chosen JavaScript as the programming language: It is the common denominator all Web applications use."

– Fabian Thorns, Director of Product Development

WDE Learning Materials

Discover the Learning Materials

Web Development Essentials (WDE) Learning Materials were released prior to the WDE exam, giving exam candidates not only the opportunity to showcase their skills in a relevant and accesible field of computer technology, but the neccesary study materials to learn the knowledge to do so. WDE Learning Materials are more than preparation for an LPI exam: They are a resource that opens the doors to the fundamentals of software development, and therefore computer science, to everyone.

The release of WDE Learning Materials and their translation into six languages within a few months of their initial launch is a testament not only to the mission of LPI, but to the broader philosophy of open source: Giving everyone access to and mastery of fields of IT is possible through open knowledge and education.

https://learning.lpi.org/en/learning-materials/030-100/

"See these resources not only as instruments for professional development, but as key knowledge in a world increasingly permeated by technology."
Read his story ...

Luciano Siqueira, Brazil
Author and Teacher in the field of IT Training and part of the LPI's
Learning Portal Team

Learning Materials

Linux Professional Institute's Learning Materials break down objectives from LPI certification exams into 1-2 hour lessons. Each lesson includes relevant assignments and an answer guide. The format of LPI's Learning Materials easily translates to classroom environments and provides structure for independent students.

Thanks to the efforts of more than 60 professionals from all over the world, free Learning Materials were made available for Linux Essentials, Web Development Essentials, and the entirety of the LPIC-1 certification. Further Learning Materials are currently in development for other certifications.

The Learning Materials are available online at https://learning.lpi.org/

Linux Essentials
Version 1.6
English
010

Web Development Essentials
Version 1.0
English
030

LPIC-1
Version 5.0
English
101

LPIC-1
Version 5.0
English
102

"I didn't only improve my life options, but am now giving back to my family, my country, and my community."
Read his story ...

Daniel Castillo, Colombia
Evangelist and Promoter of Open Source,
Sysadmin, Consultant, and Instructor

Learning Materials

Translations

Learning Materials for Linux Essentials have been translated into 11 languages so far: 2021 and 2022 saw the additions of Learning Materials in Ukrainian, Bosnian/Croatian, and Greek, with previous translations in German, Spanish, French, Italian, Japanese, Hungarian, Polish, and Portuguese. Additional translations are currently in development. Our focus on making the fundamentals of Linux freely accessible in as many languages as possible has improved international access to an education in open source.

Other translations for Learning Materials are:

LPIC-1 (101)
Complete: EN, ES, DE, IT, PT
In Development: FR, JA

LPIC-1 (102)
Complete: EN, ES, DE, IT, PT
In Development: FR, JA

Videos
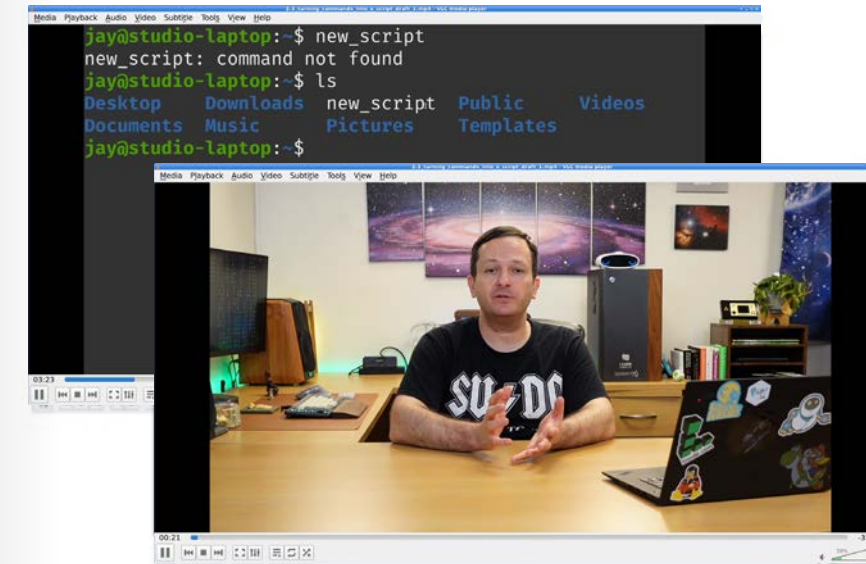
Videos to supplement the LPI Learning Materials are currently in development. These videos will be freely available on learning.lpi.org. Initial content will follow lessons provided from Linux Essentials in English.

Authors
60

Lines
415456

Commits
5611

Lessons
734
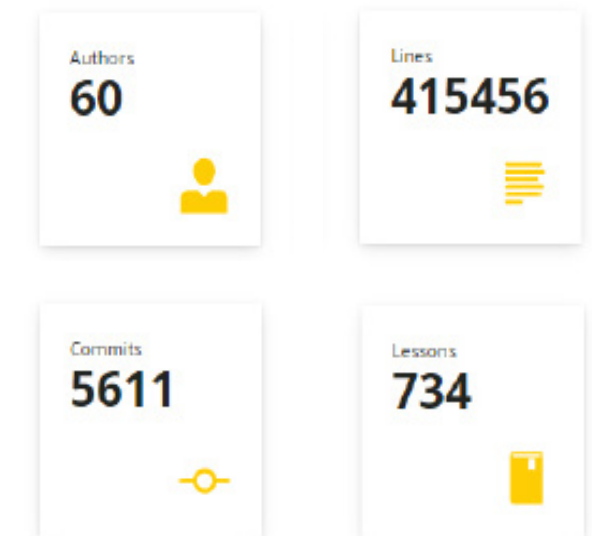
Online Exams

Linux Professional Institute (LPI) now offers the complete LPIC-3 exam track and Web Development Essentials online via the Pearson VUE OnVUE testing system. Linux Essentials, LPIC-1 (101 and 102), and LPIC-2 (201 and 202) exams are also available. All exams can be taken in English and Japanese online, while Linux Essentials and LPIC-1 have been translated into additional languages.

LPI exams have traditionally been held physically on-site, and therefore are dependent on external factors and the ability of candidates to travel. With online proctoring, candidates can write their exams at home or in the office to get certified.

Ready to schedule your Linux Professional Institute certification exam?

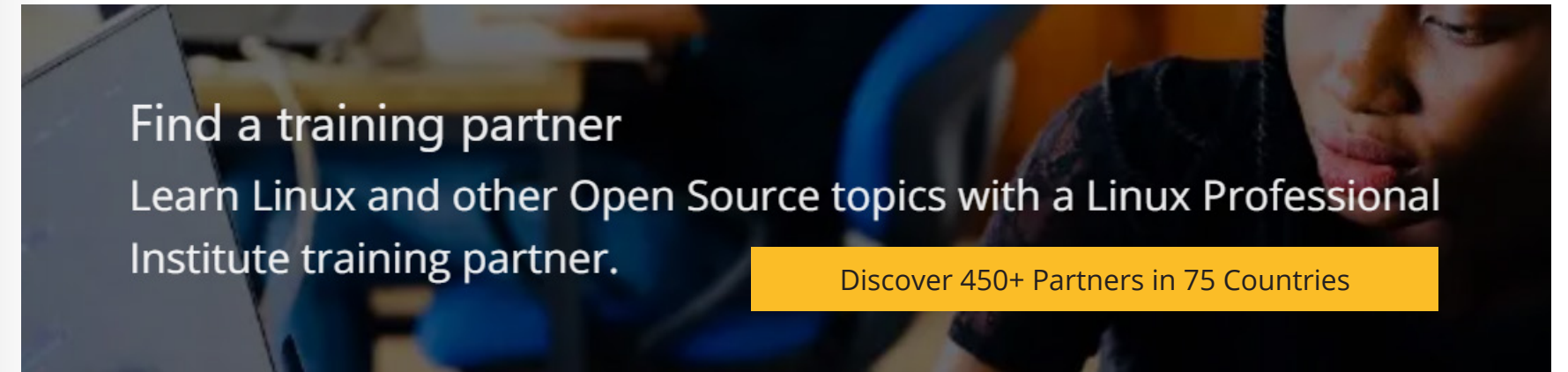*Screenshot of https://home.pearsonvue.com/lpi, where candidates can schedule their exams in a test center or online.*

During the online exam, a live proctor monitors candidates through the webcam on their workstations to provide a secure exam experience.

For more information, visit: https://www.lpi.org/online-testing

Find a training partner
Learn Linux and other Open Source topics with a Linux Professional Institute training partner.

Discover 450+ Partners in 75 Countries

In 2021, Linux Professional Institute (LPI) implemented find.lpi.org to help open source professionals and organizations browse the global network of LPI partners. Community members will easily find relevant organizations for training and related needs. The site will offer filters for geographic location, language, course delivery method, exam topics, and terms chosen by the user. This tool also helps celebrate LPI partners and their role in supporting open source.

Further developments will include the ability to find LPI community members, helping employers find certified open source professionals who are looking for new opportunities.

You can test find.lpi.org for yourself by following one of the partner categories linked below:

Channel Partners	Academic Partners	Training Partners	Community Partners
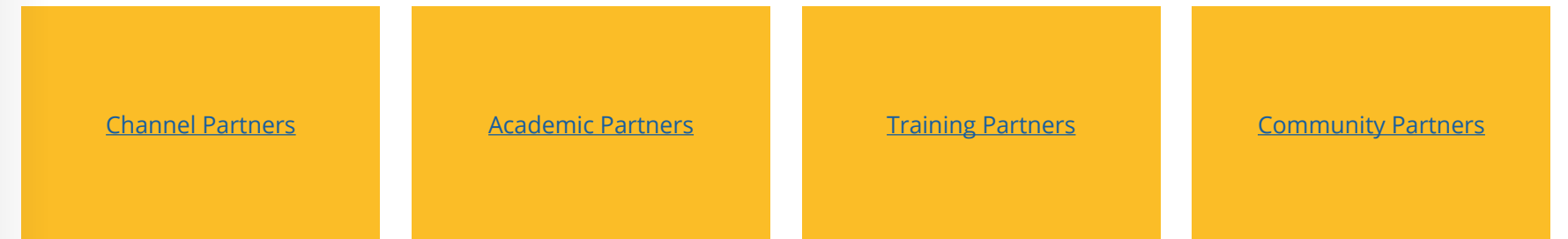
Partnership

Partner Programs

Linux Professional Institute
ACADEMIC PARTNER

Linux Professional Institute
TRAINING PARTNER

Linux Professional Institute
PUBLISHING PARTNER

Next

Linux Professional Institute
SOLUTION PROVIDER

Add value to your IT training program (Training Partner) and support undergraduate candidates at your school, college, or university (Academic Partner), with discounts on exams and complimentary courseware with options for co-branding.

Have published LPI exam material promoted to our partners in academia and IT training, and be featured on our website.

Multi-level benefits for organizations offering Linux and open source system solutions and services.

Linux Professional Institute
COMMUNITY PARTNER

Linux Professional Institute
CHANNEL PARTNER

Linux Professional Institute
HIRING PARTNER

Linux Professional Institute
MISSION SUPPORTER

Opportunities for cooperative promotions at LPI events. Access to a joint marketing fund and discounts on exam. Designed for organizations with their own communities and partner groups.

Appear in LPI newsletters and gain access to our georeferenced member base (opt-in, no names displayed – filter by certification level).

Gain community access, value services, recognition, and marketing to our community of 500,000+ IT professionals (250k+ certified).

Linux Trainers

Linux Professional Institute (LPI) actively supports the educators who help cultivate and guide our FOSS community. Linux Trainers can register first through their partner organization, and then have the option of applying to become an LPI approved trainer.

Registered Trainer

Trainers who have been registered through their partner organization
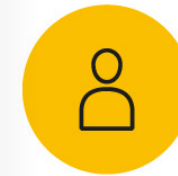
- Recieve updates on:
  - Certifications
  - Learning Materials
  - Program changes
  - News
- Priority access to trainer webinars

Approved Trainer

Trainers approved by Linux Professional Institute

- Access to all member benefits
- Access to updates about certifications and materials
- Use of LPI Approved Trainer logo
- Welcome letter (includes link to downloadable certificate)
- Discounts available for their students
- Dedicated area on discuss.lpi.org
- Eligible to join the Academic Advisory Committee (AAC or AT specific)

For more information on the prerequisites for both stages of our Trainer Partnership, and how you can apply, visit us at https://www.lpi.org/become-trainer

"Collaborating with LPI in writing completely free educational material was undoubtedly a great way to put into practice what I learned during my certification journey, while allowing me to further hone my Linux skills."
Read his story ...

Marco Colombo, Italy
System Administrator and Protocol Manager,
Learning Materials Author and Translator

Volunteer Programs

Authors

Volunteer authors from many different regions of the world share their open source success stories, experiences, and tips with the readers of the LPI blog at https://www.lpi.org/blog.

Booth Buddies

Our Booth Buddies act as important representatives of LPI and the Linux community. Booth volunteers provide assistance and support at community events. To help at community events, contact us at volunteer@lpi.org.

Translators

LPI's translations are made possible through international volunteers. In 2022, thanks to community support, our website content was made available in seven languages. Our exams can now be taken in English, German, Japanese, Portuguese (Brazilian), Chinese, Dutch, and Spanish.

Translations are required for website content, technical articles, brochures, social media, our blog, news, and events. If you are interested in becoming a contributor, contact us at volunteer@lpi.org.

Many volunteers around the world are involved with the Linux Professional Institute. They are what makes LPI strong and firmly rooted in the community.

Volunteer Projects

Exam Development Team Members

The exam development team is always looking for additional help in creating, reviewing, and translating the exam content to ensure that questions are correct, current, and fair. Your contributions can help challenge and improve the experience of future Linux users taking our exam.

Contact us at volunteer@lpi.org to become involved in the future of LPI certification.

Learning Materials Team Members

Learning Materials are continuously expanded and updated by a worldwide community of Linux and open source users. Volunteers are needed to help author, review, and translate the Learning Materials.

Contact us at learning@lpi.org to help improve freely available education in Linux.

Committee Members

LPI has a variety of committees that give community members the opportunity to collaborate on projects with like-minded individuals and provide LPI with important feedback and guidance. Committee members have the opportunity to propose new projects that can be supported (financially or developmentally) by LPI.

For more information on how you can become involved, visit https://www.lpi.org/committees.

Events

Throughout 2021, LPI continued to expand its engagement with developers in the FOSS community through events.
LPI has experienced tremendous growth in virtual event hosting and partnership. Some successes from 2021-2022 include:

LPI supported over 30 events from January 2021 – May 2022:

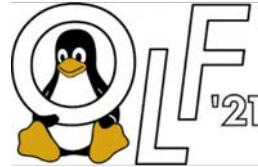|			
	Japan (in-person and virtual)	*India (Virtual)*	*Columbus, United States*
Graz, Austria	*Italy (Virtual)*	*Latin America (Virtual)*	*Italy (Virtual)*	*Brazil (Virtual)*

We presented at over 15 events:

East Africa (in-person and virtual)	*Montreal, Canada*	*Havana, Cuba*
Latin America (Virtual)	*Canada (Virtual)*	*Germany (Virtual)*	*Czech Republic (Virtual)*	*Singapore (Virtual)*

In 2021, LPI extended our event reach to Europe, the Middle East, and Africa (EMEA) and Asia-Pacific (APAC).

Grant Programs

Employability Program

The Linux Professional Institute (LPI) Employability Program is designed to enable access to training, certification, and employment opportunities to candidates in need who are developing careers in open source, through the network of LPI Partners.

The LPI Employability Program:

- Improves employability globally through five training partners around the world – and counting!
- Lowers finacial barriers to career-based education in communities from developing regions
- Supports community efforts in building knowledge and skills capacities
- Attracts employers to partner training organizations and improves their talent pool
- Helps communities see Partners as key supporters of development efforts in their region

General Grants

LPI provides General Grants for projects that we evaluate as aligning with LPI's core mission: encouraging the use of open source by supporting the people who work with it. Examples include projects for open source software development and support for open source community activities.

Entrepreneur Program

Currently in development, the LPI Entrepreneur Program is designed to match up candidates' knowledge and skills (i.e., IT knowledge, business experience, or project management) with entrepreneurial models and templates that can transform their professional expertise into open source organizations and LPI Solution Providers.
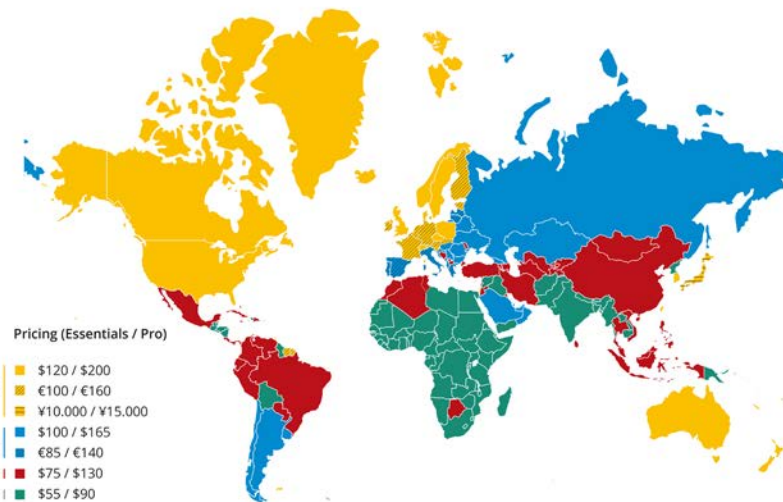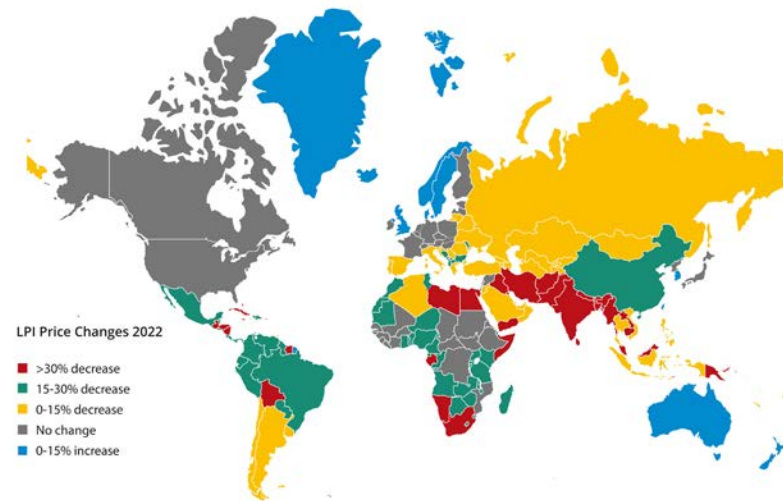
Global Price Changes

On January 1, 2022, LPI implemented global price changes to better reflect the organization's mission and commitment to social responsibility. In addition to streamlining its number of price tiers from 14 to 4, we also adjusted exam prices to better reflect global economic realities.

Basing our prices on the United Nations Development Program's Inequality-Adjusted Human Development Index (IHDI), prices were nominally increased in 51 countries and territories but were decreased – often substantially – in 145. The largest decreases were in BRICS and developing economies (42% in South Africa, 36% in India, 25% in Brazil).

Most of the modest price increases were due to consolidation of currency policy:

- Japan exam pricing uses JPY
- The Euro-zone uses EUR
- All others use the local equivalent of USD

The price changes followed a year-long review of LPI's pricing structure, incorporating feedback from staff, partners, and the broader community.

The IHDI measures countries and territories based not only on their relative economic strength, but also on local levels of income inequality.

These pricing changes have been welcomed by partners and signal a commitment to make LPI programs more accessible worldwide.

LPI Price Changes 2022
- >30% decrease
- 15-30% decrease
- 0-15% decrease
- No change
- 0-15% increase

Pricing (Essentials / Pro)
- Tier 1: $120 / $200
- Tier 1: €100 / €160
- Tier 1: ¥10.000 / ¥15.000
- Tier 2: $100 / $165
- Tier 2: €85 / €140
- Tier 3: $75 / $130
- Tier 4: $55 / $90

Current prices

Girls in ICT Day

In 2022, LPI participated in the International Girls in ICT Day. This day is in the United Nations official calendar and is organized by its agency, the International Telecommunications Union (ITU). Because LPI shares its work with its partners and the FOSS community, on April 28th we celebrated this day with women from Brazil, Mexico, Peru, Honduras, Ecuador, Costa Rica, and Portugal, where LPI was invited by the Superior Technical Institute of the University of Lisbon to join their Heroine's Journey initiative.

After the event, we have come up with a growing list of initiatives LPI wants to get involved in, such as actively working with our communities, featuring events where inclusion is the main theme, and bringing inclusion into all events in which we participate. We also want to make our People Portal as inclusive as possible, working with partners with inclusive hiring programs, people management, and benefits. Last but not least, we want to work with our educational partners to promote ways of inclusive, free education. We are talking to the University of Lisbon to create Heroine's Journeys based on our Essentials Learning Materials.
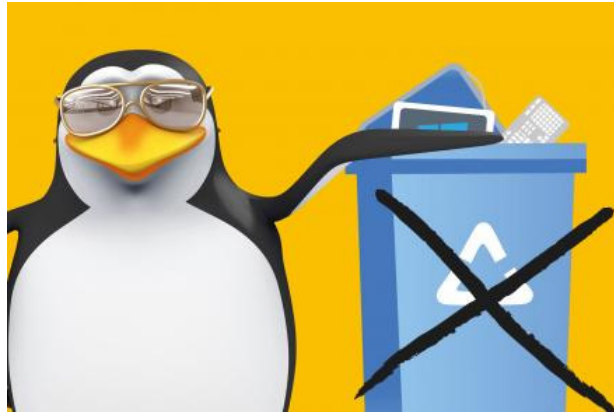
"Your learning is the best investment that you can ever make in your career."
Read his story ...

Andrew Mallett, United Kingdom
Founder of The Urban Penguin, Pluralsight Author, Learning Tree International Freelancer and part of the LPI's Learning Portal Team

Marketing and Social Media

Linux Professional Institute has shifted marketing from paid promotions to organic growth. This means creating content that is more relevant, helpful, and entertaining for open-source communities.

With the team of authors, LPI marketing published more than 70 blog posts and news articles that got over 100,000 page views in 2021. The posting that received the most views was "Eleven reasons to switch from Windows to Linux", published on the release day of Windows 11:

https://www.lpi.org/blog/2021/10/05/eleven-reasons-switch-windows-linux

The Editorial Board meets monthly. A blog posting team collects ideas about stories that involve LPI's partners in our communications to give them a stage. In 2022 partners will be informed about upcoming topics on Mattermost and with the partner newsletter, and will be encouraged to participate:

| Implemented a new translations tool to lpi.org |
| More than 1K new subscribers on YouTube |
| Google Ads: 14,005,926 impressions, 41,871 clicks, 2,341 conversions |
| Continued improving the design and UX of the lpi.org website |
| Launched @LPIEurope channels as part of a global social media strategy |
| Published more than 70+ blog and news articles on lpi.org |
| 2,033,946 pageviews on lpi.org |
| Ad Grants: 836,363 impressions, 68,181 clicks, 4,102 conversions |

Marketing and Social Media

| 12,000+ Followers (+ 20%) | 143,000+ Likes (- 1.4%) | 63,000+ Followers (+ 26%) | 3,000+ Subscribers (+ 57%) |

https://twitter.com/lpiconnect   https://www.facebook.com/LPIConnect   https://www.linkedin.com/company/linux-professional-institute/   https://www.instagram.com/lpi_org/

Month	Posts
January	59
February	73
March	95
April	89
May	67
June	78
July	80
August	82
September	94
October	99
November	81
December	64
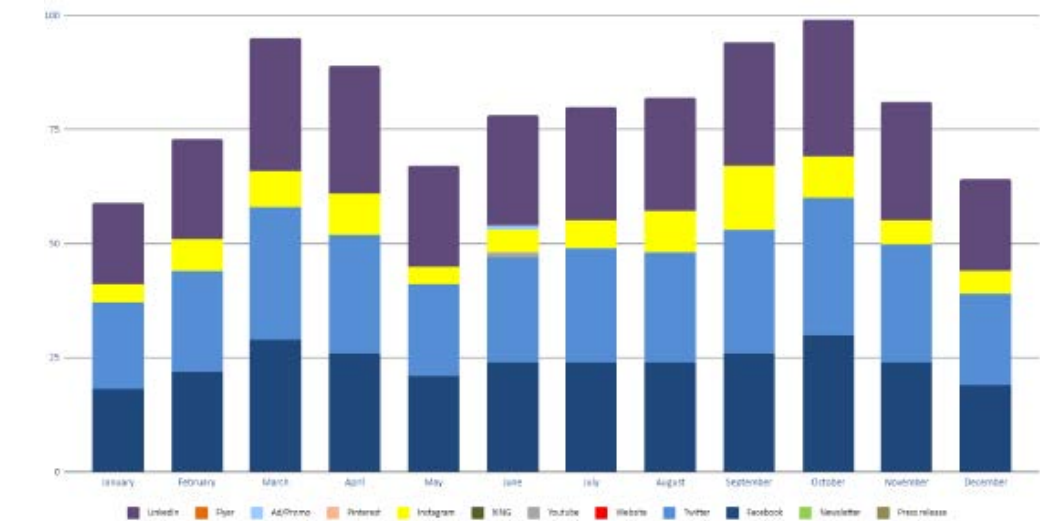
In 2021 Linux Professional Institute published 287 posts on Facebook, 291 posts on Twitter, 396 posts on LinkedIn, and 85 posts on Instagram.

Open Source Software Used at LPI

BigBlueButton

Conference software with a chatbox, optional video calling, recording, and screenshare.

Nextcloud

Cloud storage. Securely share documents with your team.

Mattermost

Chat client software for internal and partner communication.

OmegaT

Translation Memory tool intended for professional translators. Includes auto-complete and extensive glossaries.

Mailman

Manages electronic mail discussion and e-newsletter lists.

MariaDB

Open source database management with options for high availability and cloud support.

Discourse

Forum management software. Used to run https://discuss.lpi.org.

Odoo

ERP platform that LPI operations rely on.

"The common denominator here is that when all is said and done, we're simply folks eager to share our passion and our competence with the community."
Read his story ...

Nicolas Kovacs, France
Linux & Free Software Author & Trainer, Microlinux Founder and part of the LPI's Learning Portal Team

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Open Source Software Used at LPI

OBS Software

Streams meetings and webinars on platforms such as Facebook and YouTube.

Bluespice

A derivative of MediaWiki, the basis of Wikipedia. Wiki platform used at LPI to run our intranet operatives.

Weblate

Used for internal infrastructure and tools development.

ASCIIDoctor

Text editor that converts AsciiDoc to formats such as PDF and HTML5. Simplifies software documentation.

Docker

Container management. Containers are a single package containing all libraries and dependecies needed to run software.

Debian

A distribution of Linux OS used throughout the internal infrastructure at LPI.

OpenVPN

Secure Virtual Private Network software.

LimeSurvey

Questionnaire and survey builder.

Git

Software for tracking changes in source code.

GitLab

An open source DevOps platform. Used for projects completed by our Product Development team.

Drupal

Content hosting software. Provides a back-end framework for 13% of all sites on the web - including lpi.org.

Mastodon

Ad-free open source social media platform.

OpenProject

Team project management software. Supports agile, classic, and hybrid project strategy tracking.

Hugo

Static website generator. The world's fastest framework for building websites.

Simo Bertulli: The next step in the LPI journey

It has been more than a year since I started telling you about my journey within the LPI Membership Program. While that story is finished, now you can ask yourself whether it's time to start yours!

Staying focused on the project with a recurring task allowed me to dig deeper into the evolution of a community, such as LPI Membership, and understand how relevant communities can be in sharing the values of the Open philosophy.

I believe that LPI Membership is an excellent evolutionary step in the FOSS landscape, allowing people to grow personally, ethically, and

professionally while at the same time honing and demonstrating the quality of their skills and knowledge.

In my vision, LPI Membership succeeds in providing its participants with the thrust of the philosophical and ethical principles of Open Source and the right tools to capitalize on the skills needed to create professional figures in the modern ICT landscape.

LPI Membership provides the right resources to deal with the world of IT certifications while providing other benefits at the same time, such as

discounts on exam vouchers and training support material.

Moreover, the provision of PDUs for renewing certifications is a very practical way to use the skills acquired by members all over the world while supporting FOSS projects, initiatives, and communities.
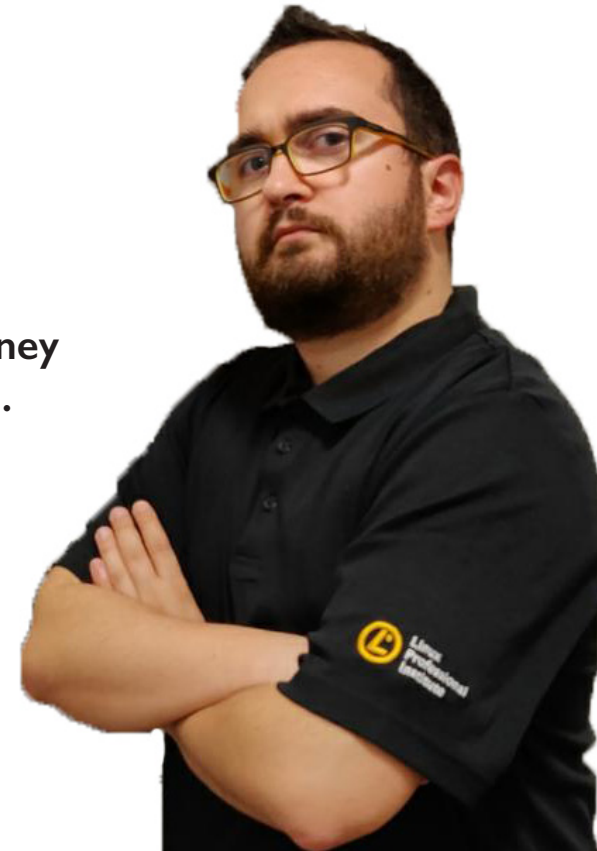
Interested in Membership?

Join the huddle!

The first issue of my #LPIMemberJourney diary was issued on January 28th, 2021. It has been a great ride altogether."
Read his story ...

Simone "Simo" Bertulli, Italy
Cyber Security Expert and a Linux Enterprise Specialist

While studying for a new certification is recommended to keep skills up-to-date on the latest open source technologies, members now also have the option of accruing Professional Development Units (PDUs) as an alternative way to maintain the active status of their certification. This allows members to use work and volunteer experience as proof of an understanding of recent changes and additions to Linux. Examples include publishing FOSS content, contributing to community projects, or working as an open-source educator.

Additional benefits of the Membership Program include:
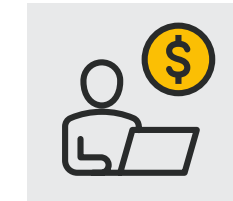
Discounts on LPI exams.

Subsidies for training materials, software, and hardware.

Membership certificate and usage of the LPI Membership logo for use online and in print.

Access to exclusive articles and webinars covering topics in technology and soft skills.

To learn more about our LPI Membership Program, visit: https://www.lpi.org/member.

Together we can support open source and improve access to careers in IT around the world!

Board of Directors

Linux Professional Institute would like to extend our thanks to the Board of Directors who guided our mission of elevating FOSS practitioners and bringing global equity through free software in 2021:

Jon "maddog" Hall

Jon "maddog" Hall is the Chairman of the Board of the Linux Professional Institute. Since 1969, Hall has been a programmer, systems designer, systems administrator, product manager, technical marketing manager, author, and educator, currently working as an independent consultant.

Hall helped formulate some of the concepts of LPI and donated personal money to allow the first 200 tests to be administered for psychometric purposes. He has traveled the world speaking on the benefits of open source software. Hall received his BS in Commerce and Engineering from Drexel University, and his MSCS from RPI.

VM (Vicky) Brasseur

VM (aka Vicky) is a corporate strategist specialising in free and open source software in the business. She is the author of "Forge Your Future with Open Source" the first and only book to detail how individuals can contribute to free and open source software projects.

Vicky has been a moderator and author for opensource.com, an author for Linux Journal and FOSSlife, the Vice President of the Open Source Initiative, and is a frequent and popular speaker at open source conferences. She's the proud winner of the Perl White Camel Award (2014), the O'Reilly Open Source Award (2016), and two Opensource.com Moderator's Choice Awards (2018, 2019).

Christopher (Duffy) Fron

Duffy Fron is a business leader with over 20 years of experience in the high tech and telecommunications industries. Duffy is known for turning around under-performing businesses and growing ecosystems in emerging markets.

Duffy holds a Master of Business Administration from Arizona State University and a Master of International Management from the Thunderbird School of Global Management. He spent 18 years in marketing leadership roles at IBM, several years leading sales teams in the telecommunication sector, and is currently the Chief Commercial Officer at Asponte Technology.

Board of Directors

Dorothy Gordon

Dorothy is the current Chair of the Inter-Governmental Council for UNESCO's Information for All Programme. She is a member of the Global Partnership on Artificial Intelligence expert working group on innovation and commercialization. Previously she served on the Global Commission on Internet Governance and worked for many years as a manager with the United Nations Development Programme.

As the founding Director-General of the Ghana-India Kofi Annan Centre of Excellence in ICT, she ensured that the backend systems ran exclusively on open source technology.

Klaus Knopper

Klaus Knopper is an Electrical Engineer with a history of three decades of Unix (different brands) and especially Linux system administration and developer of customized Linux-based operating systems, passionate hardware+software tinkerer.

He is a regular professor for Software Engineering, IT Security and informatics in the programs of Business Informatics / Information Management (Bachelor + Master) in the faculty of Business Economics and Vice President for Digitalization at the University of Applied Sciences Kaiserslautern / Germany. Also self-employed software developer and consultant.

Mark Phillips

Mark Phillips is an engineer with 40 years in Defense and Aerospace spanning Australia and the US. He has consulted in multiple countries including France, UK, Singapore, Canada, Sweden, and Germany.

Mark is an Engineering Fellow at Raytheon Missiles and Defense mentoring professionals and conducting fundamental and applied research into Defense and Aerospace. Mark is a graduate of the Royal Military College of Australia, has a Bachelor of Electrical engineering (Honors) from the University of New South Wales, a Masters in Engineering (Modelling and simulation) form Old Dominion University and is a Ph.D candidate in Engineering Management at Old Dominion University.

Uirá Ribeiro

Prof. Uirá Ribeiro is a Senior C-Level Executive with solid Information Technology background, Software Developer and Internet Architect Engineer. As an educator, has reached the top, as headmaster of a Brazilian University for more than 15 years.

He holds a Master in Informatics and Bachelor in Data Processing, among other fifteen IT certifications. He is the author of 11 books, published in English, Portuguese, Spanish and Italian, as LPI Publishing Partner. CEO and founder of Linux Certification Edutech, for 15 years he has taught Linux online classes, with more than 14,000 certified students.


Torsten Scheck

Torsten Scheck works as a software engineer for SAP, a market leader in enterprise application software. As member of the SAP HANA core team, he is in charge of the toolchain for an innovative, large-scale C++ development environment on Linux. He drives regional LUG activities and spreads the word through articles and talks.

He holds a degree in Computer Engineering from the University of Cooperative Education Mosbach and an MSc Management from the University of Glamorgan Business School.
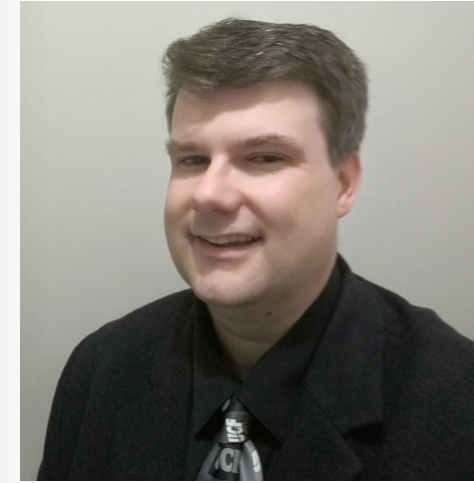
Bryan J Smith

Bryan J Smith's enterprise experience has focused on open source-based infrastructure in large-scale (10K+ instance) data centers. His work in the Americas includes some of the first and largest OSS storage, VDI, and related IaaS, PaaS, and DevOps solutions on behalf of several industry leaders.

He is a graduate of UCF's College of Engineering and Computer Science, holds four dozen IT certifications from a dozen different programs, and has been involved with the development of several, including LPI, for over a decade.

Thiago Sobral

Thiago Sobral works with Linux, Free, and Open Source software since 1998. He has worked with infrastructure to applications covering networks, security and all the issues that come up in customer environments and is a former employee of Conectiva, Red Hat and SUSE .

He is part of the Digital Law Commission in Sao Paulo, was a lecturer and trainer, created FOSS events and participated in hundreds. Today he is Global Offering Manager for Open Source at IBM. He is heavily involved in various communities around the world and has a holistic view of the needs of the communities, businesses, professionals and early career developers.

Timeline entries (top row):

- **1998** — Dan York writes "Creating a Linux Certification and Training Program" for Linux Gazette
- **1998** — Separate certification efforts merge into a single one
- **1999** — First mission statement, Initiation Job Task Analysis for LPIC attracts 1400 participants
- **1999** — Advisory Council and German Affiliate are created. LPI logo contest. Initial sponsors sign on
- **1999** — LPI first incorporated and signed with Pearson VUE
- **2000** — First LPIC-1 certification holder
- **2001** — First LPIC-2 certification holder
- **2002** — Cert #1.000 delivered
- **2002** — First LPI certifications delivered in Brazil
- **2003** — 500 people esxam lab in Hong Kong and World Summit on Information Society (WSIS)
- **2003** — Invitation to present as open source expert by ITU
- **2004** — UN Visit, keynotes and sponsoring of first ever open source in Africa conference
- **2008** — First LPIC-3 Security certfication holder
- **2009** — Cert #50.000 delivered
- **2010** — First LPIC-3 Mixed Environment certification holder
- **2011** — 100.000 Certifications delivered
- **2012** — First Linux Essentials certification holder
- **2014** — 500.000 registrations
- **2017** — First DevOps Tools Engineer certification holder
- **2017** — Bylaw change to include membership
- **2017** — 200.000 Certifications delivered
- **2018** — First cert holder for LPI DTE, also added BSD
- **2019** — Learning Portal launched
- **2020** — Membership program launched
- **2020** — Made online exams available
- **2021** — 250.000 Certifications delivered
- **2022** — Release of Web Development Essentials

Back in 1998, Apple had released the iMac and Microsoft did Windows98. Unix was still a force on server computers, but Linux was rapidly becoming a growing phenomenon with millions of users worldwide. Upstart companies such as Red Hat and Caldera were attracting the attention of corporate users with their commercial packaging and support of Linux.

While analysts and IT journalists maintained that Linux would never get beyond a niche presence, a leaked Microsoft memo called "The Halloween document" described the company's growing perception of Linux and open source as a threat, as well as ways to combat it.

That year, two separate community efforts were building momentum to try to address one of the perceived deep gaps in Linux support: If a company chose to deploy Linux, how would an IT manager be able to find qualified people to install, maintain, and support it? While software development and commercial sales of Linux were becoming mature and common, less attention had been paid to how the world would be able to use it once understanding its benefits.

In October 1998, Microsoft trainer Dan York published in the Linux Gazette an article calling for a community Linux certification program, resulting in an active community discussion group. Meanwhile, a separate discussion led by Evan Leibovitch at the Canadian Linux Users Exchange was promoting a similar initiative. Jon "maddog" Hall knew both leaders, introduced them, and they merged their efforts into a single project to create a community-based Linux certification program.

The agreed objective was to take a different path from most IT certifications of the day, by being:

- Non-profit
- Neutral with regard to vendors, open source operating systems, and software distributions
- Opposed to using certification as a tool to sell training
- Psychometrically validated
- Multilingual and globally accessible

By the spring of 1999, the certification effort caught the attention of Benoy Tamang at Linux distributor Caldera, which paid for Dan and Evan to meet with the company and make a pitch for funding. The day before the pitch — April 4, 1999 — they snuck into the single meeting room of the La Quinta Inn in Orem, Utah where the three-tier program now known as Linux Professional Institute Certification was created. (While other LPI programs have since been added, the "LPIC" track remains functionally identical to the 1999 design.) Caldera liked what they saw the next day and became LPI's first corporate sponsor. Other sponsors, including IBM and Silicon Graphics, as well as Linux vendors SUSE and TurboLinux, came on board soon after.

With a structure and preliminary funding in place, a team needed to be formed. Dan and Evan were joined by community members Charles "Scudder" Mead and Tom Peters. Rounding out the initial team was Scott Murray, a psychometrician who would ensure that the effort's exams could be scientifically validated and uphold a high standard of quality

History

from the very start. These five were the original incorporators of LPI. The non-profit was incorporated in the province of New Brunswick, Canada, because it was one of the few jurisdictions that allowed virtual board meetings in 1999, and because Canada was considered to be politically neutral.

After the first Level 1 exams were launched in 2000, followed by Level 2 in 2001, LPI gained international acceptance and community support. In November 2003, LPI hosted more than 500 people at its exam lab at LinuxWorld Hong Kong, the largest of many such events we have held. Level 3, focusing on enterprise-level systems, followed in 2007. LPI launched the introductory Linux Essentials program in 2012 and DevOps certification in 2017. Together with the BSD Certification Group, in 2019 we launched the BSD Specialist program. In 2019 we introduced learning.lpi.org, a portal for learning materials that offered the first in a series of free study guides aimed at assisting students and trainers alike. International affiliates were established around the world, first in Germany, Japan, and Brazil. LPI has since certified people in more than 190 countries and territories and delivered exams in nine languages.

Also in 2003, LPI participated in the first-ever United Nations World Summit on the Information Society, leading a delegation of 23 people who promoted open source and distributed thousands of Linux CDs to diplomats and NGOs. A partnership with L'Agence Universitaire de la Francophonie (AUF) brought low-cost open source certification to some of the world's least developed economies.

More recently we have launched new employment programs, participate in Software Freedom Day worldwide, continue to participate in open source conferences everywhere, and worked with partners to advance local advocacy efforts. A 2022 move to align LPI exam prices with the United Nations Inequality-Adjusted Human Development Index was a further attempt to make our program more accessible and inclusive.

Over time, the LPI network of partners has expanded in both numbers and geographic reach. And last year (2020) we formalized a relationship with Network Development Group (NDG) that had made LPI programs more available to the thousands of institutions and millions of students in the Cisco Networking Academy.

For its 20th anniversary in 2019, the LPI Board introduced membership, as part of a substantial change in the organization's governance and direction. This change has enabled LPI-certified individuals to become Members of LPI, elect its Board, and help shape its direction. Our first-ever Board election was held at its Annual General Meeting in June 2021 (held virtually because of the pandemic). As part of governance changes, LPI also introduced a Code of Ethics and committed to promoting professional conduct and personal development within its community of certified open source practitioners.

As it passes through the worst of the COVID years, now offering at-home certification exams, LPI's history continues to be written. New partnerships, certification programs, languages, accessibility initiatives, community outreach initiatives, and free training materials are in the works. Online portals, introduced in 2022, have simplified the way both LPI partners and exam candidates can work with us.

All of us at LPI want to thank everyone who has helped it grow from a couple of mailing lists into the world's largest open source skills certification program. Special recognition is due to the companies Linuxcare and Starnix for keeping Dan and Evan respectively on their payrolls while they worked on LPI during its early formation. Starnix, now headed by Kevin Glendenning, continues to provide IT services to LPI.

Thank you.