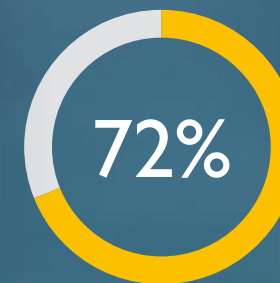Linux
Professional
Institute

2023
Annual
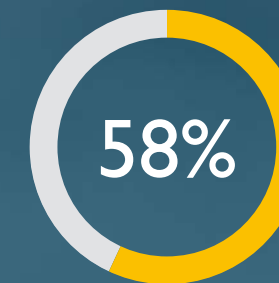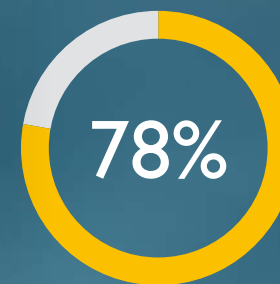# Review

72%

72% of hiring managers state that certification and formal training are a priority for evaluating job candidates.

- Open Source Jobs Report 2022

58%

58% of companies report open source talent is given higher salary increases than other business areas.

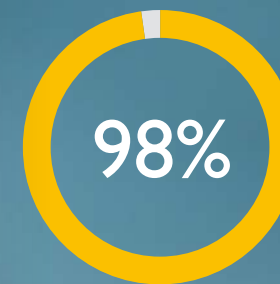- Open Source Jobs Report 2022

78%

78% of hiring managers are hiring the same or more open source professionals.

- Open Source Jobs Report 2022

The ROI per credentialed employee is estimated to be as high as $30,000

- Pearson VUE Value of IT Certification Report 2023

98%

98% of organizations use open source software

- 2022 Software Bill of Materials and Cybersecurity Readiness Report

92%
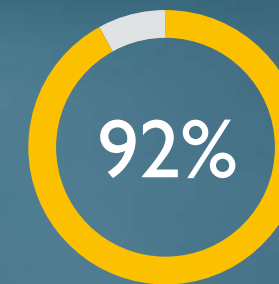
92% of candidates are more confident in their abilities after certification.

- Pearson VUE Value of IT Certification IT Certification Report 2023

Photo: iStock.com/Dgwildlife

lpi.org

Foreword

Writing this introduction to the 2023 LPI Annual Review is bittersweet for me, since this will be the last introduction I write as the Board Chairman of the Linux Professional Institute and will be the last time I sit on the Board of Directors.

The new Bylaws allow for a three-year term plus the option of being elected for a second three-year term for a total of six consecutive years before there has to be a "term limit" gap. As it is, I have been on the board for nine years and if I were to run for a second, three-year term I would still be on the board at 76 years of age, with the last time I was doing systems administration work or "professional programming" more than two decades ago. I have been honored to be on the Board and the Board Chair since 2015, and I feel it is both time for new leadership and time for me to finish some of the other projects that I have been working on for a long time.

I have also been honored to work with a great staff who are excited to be working for LPI and came up with innovative ideas and programs such as "Upgrade to Linux" and "Linux Clubs."

This year is a good time to step down. Due to the term limit provisions of the Bylaws, we will have five board positions (including mine) up for re-election as well as three board seats that could be filled with member-nominated candidates on a member-driven ballot. That would be a total of five to eight new board members to bring new ideas to the organization.

I will not be disappearing from LPI. I plan on helping with blog articles and conference presentations when people ask. I can work with LPI committees and I particularly want to work with young people, as I always have over the years, but I will pass on the formal board baton to others who may have more energy than I currently have.

As an example, since I will not be on the Board nor running for the Board I am eligible (according to the Bylaws) to work directly with the Nominating Committee and some of my old friends. So I hope that you will give back to LPI by joining the Board of Directors or by joining one of our technical committees. Maybe we will work together in the future.

Pax Vobiscum,

Jon 'maddog' Hall
Chairman of the Board
Linux Professional Institute
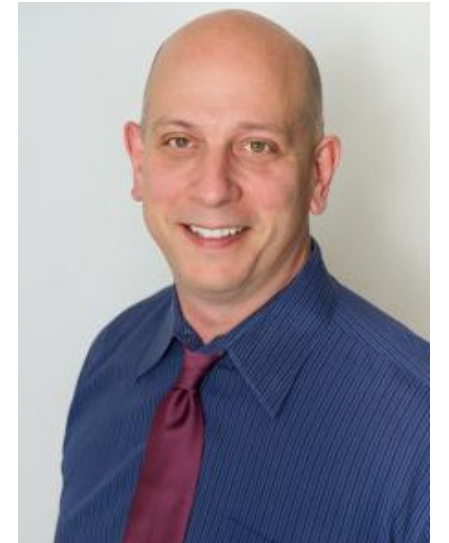
Welcome to the 2023 Annual Review for the Linux Professional Institute (LPI). This document represents the ongoing work we do here at LPI alongside our members, certifications holders, partners, and volunteers to further our shared desire to fulfill the core mission to "promote the use of open source by supporting the people who work with it."

2023 has seen the beta launch of the Open Source Essentials (OSE) program and certificate. The final launch and general availability is taking place in February 2024. This is the fourth Essentials-level certificate program and joins last year's Security Essentials and prior launches of Web Development Essentials and Linux Essentials.

We've developed a broader and gentler introduction to open source knowledge and associated skills. The expanded Essentials and Learning Materials programs have aided us in our search for more and new enthusiasts and professionals. Visit our website for more details on the OSE exam and keep an eye on the Learning Materials site for free content that can aid in your studies, be used for teaching, or as a reference for you to create your own materials.

As always, we continue to grow our programs and volunteer base. Our volunteer programs are one of the primary ways in which we reach the rest of the world. Please, consider joining our outreach efforts to help others to teach, learn, and use Linux and open source tools if you have some time available.

To everyone who is already helping out, a big hug and thanks to all of you. All of the accomplishments that we're sharing in this annual review, and more, were made possible with the great work of the dedicated staff and board members at LPI as well as many exceptional volunteers from around the world.

Thanks for reading this review and let us know how we're doing. If you aren't certain how you can help, send us an email at volunteer@lpi.org or join us on our discussion site any time and we'll come up with some ideas together.

Take care and have a safe, fruitful, and healthy 2024,

G. Matthew Rice
Executive Director
Linux Professional Institute

Table of Contents

Partners Sharing Their Knowledge

Linux Professional Institute (LPI) has many hundreds of partners around the world. They form the backbone of a strong community dedicated to promoting the use of open source by supporting people who work with it. Our partners do this in a variety of ways, acting above all as partners of our certification holders themselves.

Partners provide support for learning about Linux and open source technologies through training, exam taking, technical support, jobs, and publications. In short, they represent concentrated knowledge on open source topics. A large amount of knowledge those seeking certification is available to a wide audience free of charge, providing useful tips and guidance to the community of several hundred thousand certification holders and those who want to become one.

Blog Series About Security Essentials
This past Spring, partners worked with us to introduce the new Security Essentials certificate. They explained in a blog series **why IT security is important for everyone** and how to prepare for the new exam. The blog series received more than 2 million impressions just on Facebook, with more than 25,000 people clicking on it.

About Different Certification Levels
The security series was followed by a series that emphasized the **special features of the individual LPI certificates and certifications** and explained what content they convey. For whom is each Essentials program aimed? For whom is LPIC-1 interesting; how can you build on achieving this certification? Why is certification important for employee development and retention? The LPI community honored this series with more than 4.4 million Facebook impressions and more than 30,000 clicks. Wow!

Introduction to Web Development Essentials
These numbers were then topped by the **series on Web Development Essentials**: What's it all about? How do I prepare for the exam? Does this career path have a future or will AI replace developers one day? Our partners shared their knowledge and gave their assessments. More than 5 million impressions and almost 50,000 clicks were the result, thanks to an enthusiastic audience.

And a Lot More
In addition to the series that various partners created together, some partners

contributed their own series, such as the fantastic YouTuber Morrolinux from Italy and the great learning materials author Marco Colombo. Throughout the year, the former repeatedly gave **practical tips on working with Linux**, from recovery tools and games to building your own WiFi repeater. In six blog postings, Marco Colombo described in detail how to prepare for **Web Development Essentials**. These two series also received an overwhelming amount of attention, both on social media and on lpi.org.

We are very happy to be able to work with such great partners. We also hope to work with more partners in 2024 to increase and spread knowledge of Linux and open source tools.

If you are an LPI partner and would like to participate in one of the next series, just send an email to communications@lpi.org.

"Acquiring official certifications, especially from renowned institutions like LPI, remains a significant career booster for those aspiring to specialize in Linux administration within the corporate sphere."
Read his story ...

Alexandre Antonio Barelli
Programmer and Security Expert
Military Police of São Paulo

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 currently offers vendor-neutral Linux, BSD, and DevOps certification, as well as certificates in Linux, Web Development, Open Source, and Security.
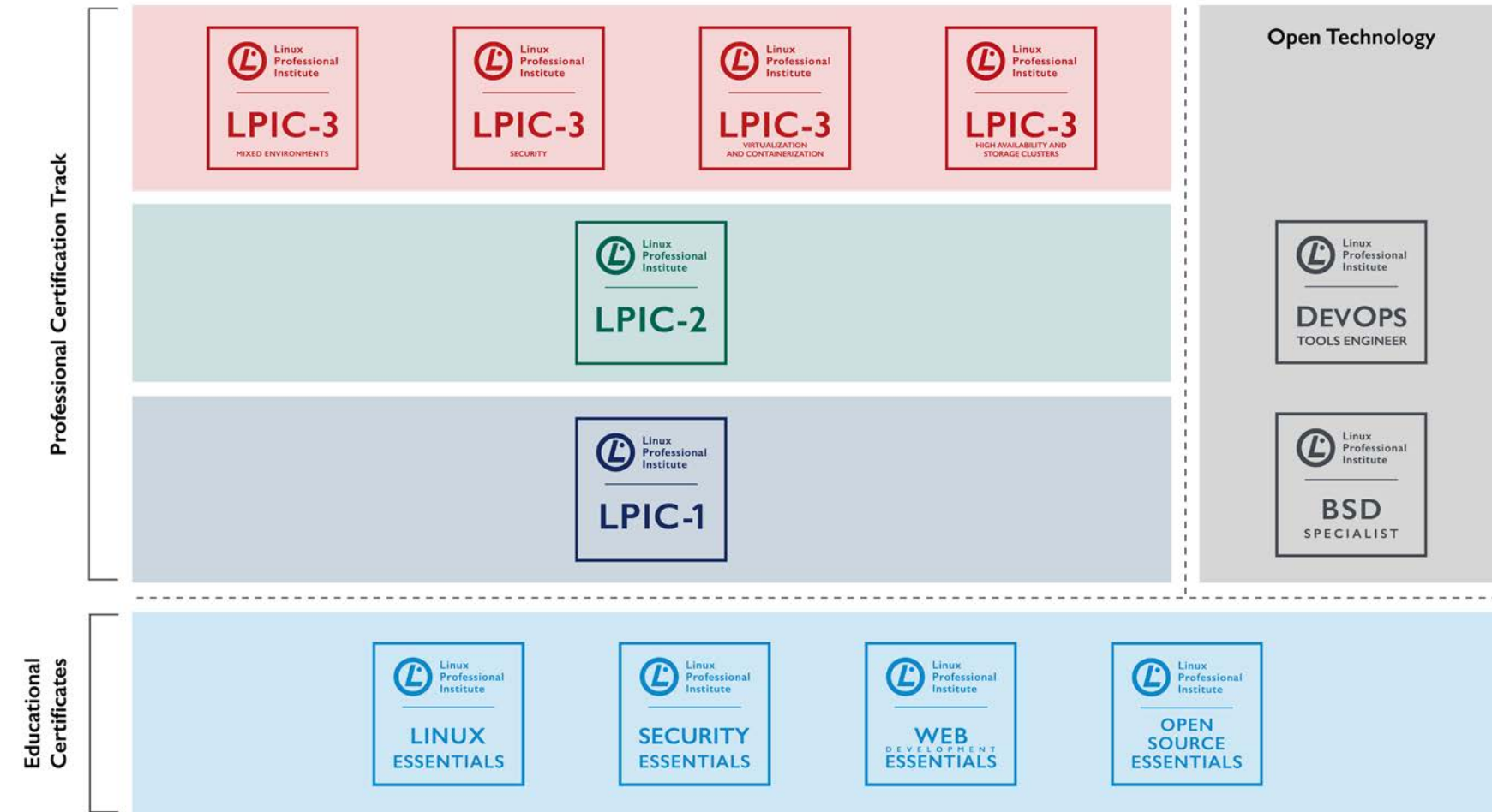
Online Exams

Linux Professional Institute offers our Essentials and LPIC track exams online via the Pearson VUE OnVUE testing system. All exams can be taken in English and Japanese online. Linux Essentials and LPIC-1 have been translated into additional languages.

While LPI exams have traditionally been held physically on-site, online proctoring has opened new opportunities for candidates to become certified, allowing exams to be written at home or in the office.

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 work-stations to provide a secure exam experience.

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

Essentials Certificates

Linux Professional Institute (LPI) Essentials certificates help individuals new to computer technology discover opportunities in IT with an internationally recognized credential.

Supported by free LPI Learning Materials, studying for Essentials certificates enables students, professionals, and tech enthusiasts to solidify their knowledge, and to pave the way for a more robust career and education in technology.

Essentials certificates currently cover Linux, Security, Open Source, and Web Development. LPI aims to expand development of the Essentials track to cover all major disciplines in IT, with a special focus on relevant, cutting-edge industry needs and open source technologies.

Future Essentials certificates and translations to Essentials exams and Learning Materials are to be released throughout 2024.

Start your Essentials journey

"Thanks to LPI and the support of my colleagues, I have gained confidence, expanded my knowledge, and discovered new opportunities for growth. This experience has reinforced my belief in the power of certifications and their ability to validate skills, open doors, and enhance career prospects."
Read her story ...

Lilia Sfaxi
Computer Science & Mathematics Assistant Professor
Institut National des Sciences Appliquées et de Technologie, Tunisia

Open Source Essentials

Linux Professional Institute released beta exams for the latest certificate in the Essentials series, Open Source Essentials, in Q4 of 2023. Following the successful beta launch, candidate feedback was used to further build the psychometric strength of Open Source Essentials exams. The official launch of Open Source Essentials is scheduled to take place in 2024.

Open Source Essentials certifies that candidates from any professional background possess the knowledge to work successfully within an open source environment or business. This knowledge will allow developers, managers, lawyers, and any other professional working in the field of open source to communicate, share a common perspective and terminology, and collaborate successfully.

The certificate covers fundamental aspects of free and open source software, open content, and open technology. It includes topics from various industries, such as business and law, allowing individuals to understand the concepts behind open source and engage with the open source community.

Exam objectives can be reviewed on the LPI website. Open Source Essentials will be released for Pearson VUE test centers, remotely on the OnVUE platform, and at all events where LPI hosts exam labs.

Exam code: 050-100
Languages available: English
Validity period: Lifetime

For more information: https://wiki.lpi.org/wiki/Open_Source_Essentials_Objectives_V1.0
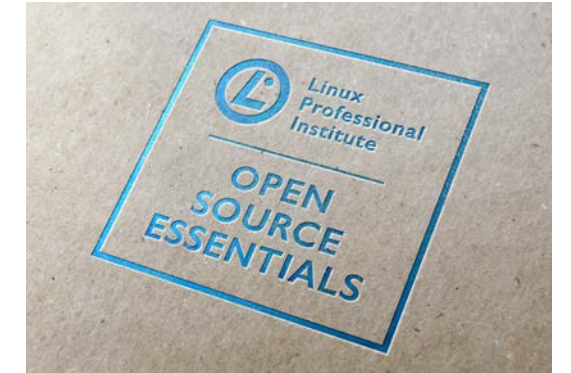
Exam topics

051: Software Fundamentals
052: Open Source Software Licenses
053: Open Content Licenses
054: Open Source Business Models
055: Project Management
056: Collaboration and Communication

"For me, Linux Professional Institute (LPI) is a reference point, and I know how gratifying it is to be someone with an LPI certificate. I know how important certifications are, and I believe every professional [in IT-related fields] should have one."
Read her story ...

Isabela Fedrigo
Information Security Analyst

Learning Materials

Linux Professional Institute 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 Learning Materials easily translates to classroom environments and provides structure for independent students.

Thanks to the efforts of more than 65 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 certificates, such as Security Essentials.

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

It is important to us that the knowledge required for Linux Professional Institute exams be accessible to as many people as possible. The best way to do this is to make study materials available in the native language of candidates. That is why LPI collaborates with many volunteers to translate our Learning Materials into as many languages as possible.

For Linux Essentials, Learning Materials are available in 14 languages, with more in preparation. Web Development Essentials have already been translated into 11 languages. For more details on available translations and materials for LPIC-1- 3, DevOps, and BSD, visit: https://learning.lpi.org/en/about/translations/

Exam	Linux Essentials	Security Essentials	Web Development Essentials
Exam Code	010	020	030
English	🎓 📖	🎓	🎓 📖
Bosnian / Croatian	📖		
French	🎓 📖		📖
German	🎓 📖		📖
Greek	📖		📖
Hungarian	📖		📖
Italian	📖		📖
Japanese	🎓 📖	🎓	🎓 📖
Polish	📖		
Portuguese	🎓 📖		📖
Spanish	🎓 📖		📖
Turkish	📖		
Ukrainian	📖		📖
Vietnamese	📖		📖

The tables below give you an overview of the availability of our exams and Learning Materials.

🎓	The exam can be taken in this language.
📖	The Learning Materials are completely available.
📖	The Learning Materials are still in development, but parts have already been published.

Lessons	Authors	Lines	Commits
852	**65**	**457619**	**5779**

Translations are a great first step into the LPI community.

If you know the technical background of one of our exams, and you want to translate the Learning Materials into your language, write an email to learning@lpi.org and join our network of contributors!

Membership Program

Linux Professional Institute (LPI) reached more than 250 active members in 2023. LPI Members 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 instead of certification renewal to prove an understanding of recent changes to Linux technologies. Examples include publishing FOSS content, contributing to community projects, or working as an open source educator. To learn more about our LPI Membership Program, visit: https://www.lpi.org/member.

Additional benefits of the Membership Program include:
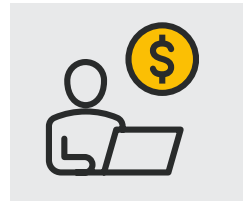
Discounts on LPI exams.
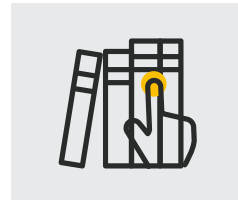
Subsidies for training materials, software, and hardware.

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.

"My involvement with LPI has broadened my horizons considerably, sparking my interest in areas like DevOps (my next target for certification), cloud computing, FinOps, and data science. Association with LPI has encouraged the University to explore other skill-development partnerships."
Read his story ...

Bigani Sehurutshi
System Administrator, Linux Educator
University of Botswana
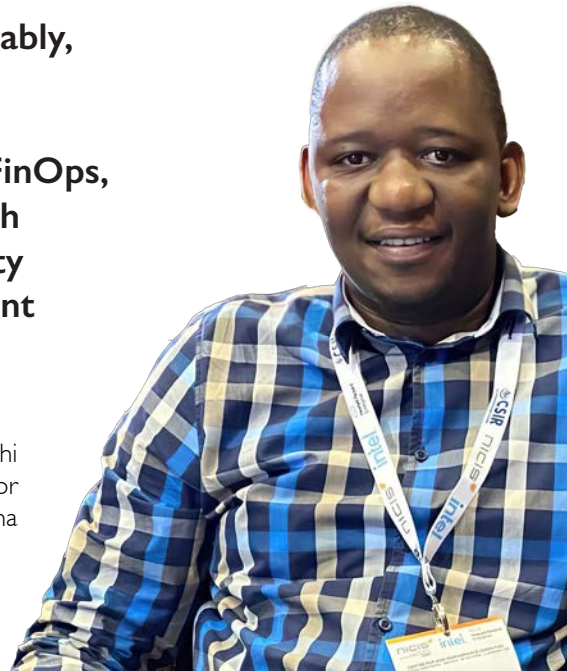
Approved Trainers

Linux Professional Institute actively supports educators who help cultivate and guide our FOSS community. The LPI Approved Trainer program helps Linux educators demonstrate their credibility with endorsement from LPI (such as use of an LPI Approved Trainer logo.) LPI Members with professional levels of certification (such as LPIC-1) are eligible to apply via CV or LinkedIn profile and a video submission of the applicant teaching material from LPI certification track.

Approved Trainers

Trainers approved by Linux Professional Institute benefit from:

- 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

13 Approved Trainers and counting!

For more information on prerequisites and how you can apply, visit us at: https://www.lpi.org/become-trainer

"Achieving the long-awaited LPIC-1 and LPIC-2 certifications were pivotal moments, leading to a period of time where I delivered speeches at prestigious events such as Campus Party and renowned FISL conferences [later becoming a Linux teacher, author, and graduate of Computer Engineering.]"
Read his story ...

Prof Juliano Ramos
Linux Educator, Consultant, and Analyst
Grupo Utah, Share RH, Prodesp, Brazil

Partnership

Partner Programs

ACADEMIC PARTNER

TRAINING PARTNER

PUBLISHING PARTNER

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.

COMMUNITY PARTNER

CHANNEL PARTNER

HIRING PARTNER

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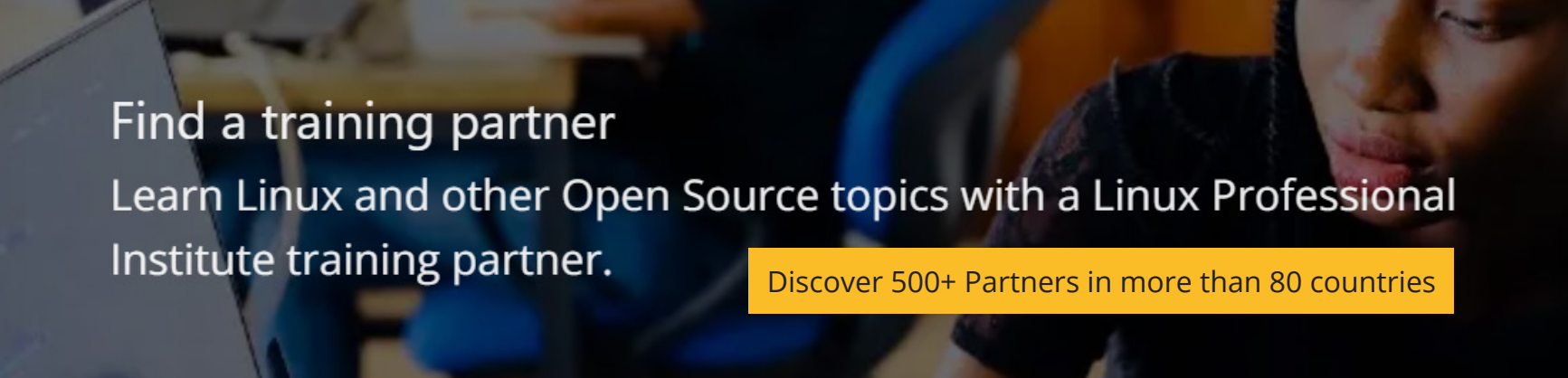
Appear in LPI newsletters and gain access to our georeferenced member base (opt-in, no names displayed — filtered by certification level).

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

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

Discover 500+ Partners in more than 80 countries

Linux Professional Institute implemented find.lpi.org to help open source professionals and organizations browse the global network of LPI partners. Community members can 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.

LPI community members can opt-in to have their profiles searchable on find.lpi.org, helping certified open source professionals obtain new opportunities at potential employers. Members can add or update their profile at https://people.lpi.org/profile.

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** **Members**

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 translations are made possible through international volunteers. Thanks to community support, the LPI website is now available in seven languages. Our exams can be taken in English, French, German, Japanese, Portuguese (Brazilian), Chinese, 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 Linux Professional Institute. They are what makes LPI strong and firmly rooted in the community.

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 ideas that can be supported by LPI.

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

Events

Throughout 2023, 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 include:

LPI supported over 25 events from January - December 2023.

AsiaBSDCon 2023
March 30-April 2, 2023, Tokyo University of Science, Tokyo, Japan

Japan

Mexico

Germany

Brazil

Colombia

Paraguay

Croatia

Bulgaria

Argentina

Kosovo

Italy

Cuba

United States

Brazil

United States

Spain

Poland

Germany

Upgrade to Linux

96.3% of the top 1,000,000 web servers are using **Linux**

UTL Upgrade to Linux

16 Partners

21 Volunteers

Join the Initiative!

15 Discord Members

Upgrade to Linux (UTL) was launched in 2022 as an initiative by open source enthusiasts (including staff of Linux Professional Institute) to encourage adoption of Linux and FOSS.

UTL provides resources to help users understand the benefits of open source, with an emphasis on optimizing hardware longevity and free use - reducing e-waste and finacial burdens for schools, governments, and organizations.

The UTL website offers How-Tos, recommended FOSS tools, communities, and other features such as testimonials and events. You can view these resources at www.upgradetolinux.com.

Marketing and Social Media

Clicks ▾ 57.5K	CTR ▾ 6.88%
Impressions ▾ 836K	Conversions ▾ 2.44K

Dec 26, 2022

Ad Grants:
871,226 impressions,
64,766 clicks,
5,533 conversions

Google Ads:
5,120,760 impressions,
54,543 clicks,
13,277 conversions
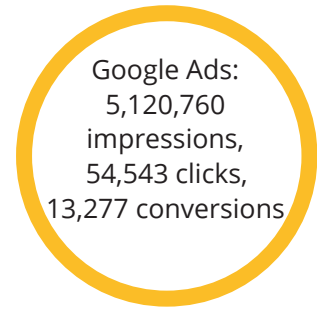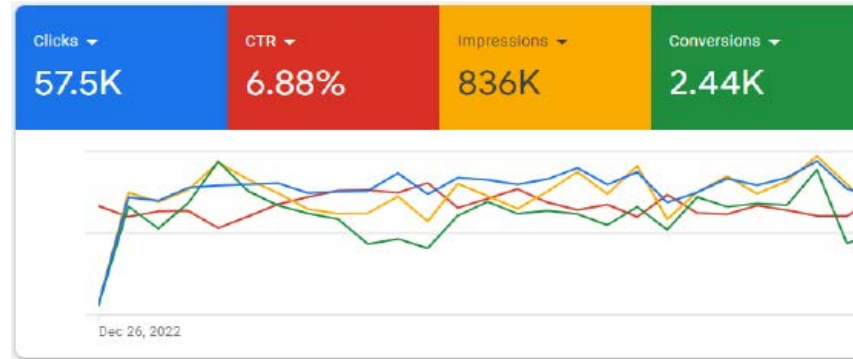
Launched the new website based on WordPress and improved findability

Started a Mastodon account on FOSStodon.org

Added Vietnamese language to the website and improved translations in other languages

Established new communications strategy that puts LPI partners in the spotlight

Started Open Marketing, inviting everyone at LPI to share ideas and efforts

Growth over all social media channels, globally and regionally, to 250,000+ followers overall

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Marketing and Social Media

13,000+ Followers

140,000+ Followers

77,000+ Followers

4,300+ Followers

250+ Followers

https://twitter.com/lpiconnect

https://www.facebook.com/LPIConnect

https://www.linkedin.com/company/linux-professional-institute/

https://www.instagram.com/lpi_org/

https://fosstodon.org/@LPI
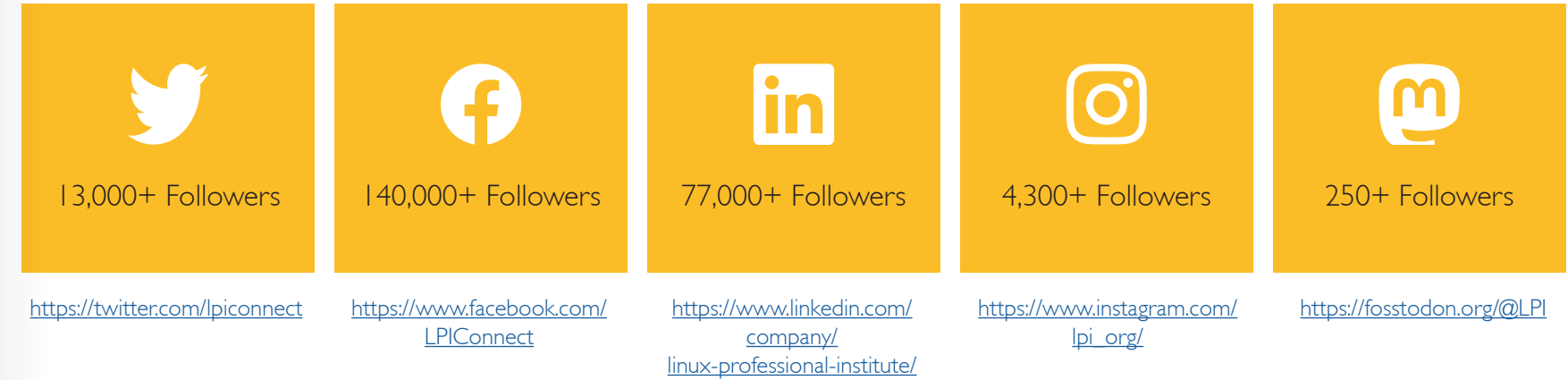
Month	Posts
January	52
February	72
March	80
April	55
May	76
June	74
July	67
August	80
September	95
October	86
November	101
December	47
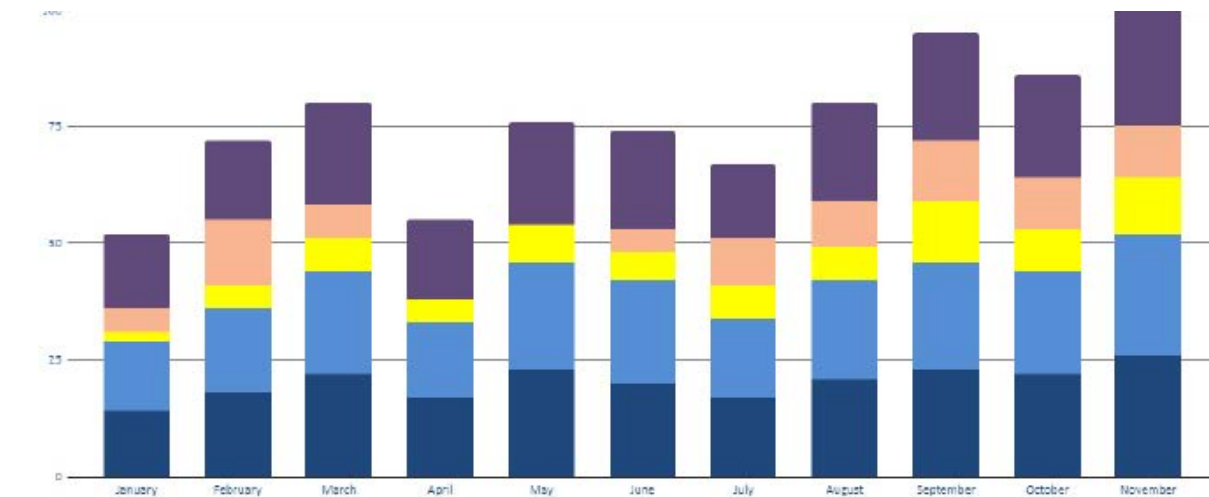
In 2023 Linux Professional Institute published 234 posts on Facebook, 236 posts on X, 234 posts on LinkedIn, 88 posts on Instagram, and 93 on Mastodon.

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.
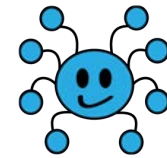
Mindmup

Mind-map creation tool for visualizing and planning projects.

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.

"Thanks to the LPIC-1 certification and industry experience, I pursued an IT career opportunity in the finance industry. This experience unveiled to me Linux and Unix software that I had never worked with before and solidified my focus in enterprise open source!"

Read his story ...

Sam Wachira
Sr Technical Account Manager
Red Hat UK

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.

WordPress

Content hosting software that powers roughly 43% 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.

Mattermost

Chat client software for internal and partner communication.

Hugo

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

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 2023:

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 specializing in free and open source software in 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 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).

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.

Board of Directors

Emmanuel Nguimbus

Emmanuel Nguimbus is a computer engineer with more than 12 years of experience. He is also the co-founder of open source projects Teledocta and OpenStudi, as well as Chair of the OPENSECURE Foundation, a non-profit organization promoting open source and cybersecurity.

Emmanuel is a consultant in for several private and government open source projects. He is a member of private and public working groups, project teams, and monitoring and steering committees. Emmanuel is experienced with issues of training, management, entrepreneurship, strategy, and governance.

Klaus Knopper

Klaus Knopper is an Electrical Engineer with a history of three decades of system administration in Unix (different brands) and especially Linux, a developer of customized Linux-based operating systems, and a 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. Klaus is also a self-employed software developer and consultant.

Board of Directors

Ted Matsumura

Ted Matsumura has worked in the tech industry since the mid 1980s. As a product manager for Adaptec Japan, he has promoted Linux and FOSS at start-ups as well as larger companies as a product manager including Intel, Packet Engines, Penguin Computing, and smaller companies.

Ted has contributed to Crouton, which enables Linux to run on Chromebooks, and worked with Linux kernel developers to develop the first Gigabit Ethernet Linux drivers. Ted has taught Linux and computer science as an adjunct professor, and currently works at a multinational firm on secure cloud environments, and DevSecOps.

Uirá Ribeiro

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

He holds a masters degree in Informatics and bachelors degree in Data Processing, among fifteen other IT certifications. He is the author of 11 books, published in English, Portuguese, Spanish, and Italian, as an 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.

Michinori Nakahara

Michinori Nakahara spent over 33 years at IBM Japan in various leadership positions, including Manager of Linux business development, working closely with IBM's global partners. He then served as Chief Training Officer for a Tokyo-based open source software start-up. In November 2022, he was made Japan General Manager for AutoGrid Systems.

Nakahara has studied in both the U.S. and Japan, with extensive experience working with Japanese, US, and European IT companies. He has served on various committees and forums, and in organizations dedicated to Linux and open source education and policies.

Thiago Sobral

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

Thiago is part of the Digital Law Commission in São Paulo, was a lecturer and trainer, created FOSS events, and participated in hundreds of events. Today he is Global Offering Manager for Open Source at IBM. He is heavily involved in various communities around the world.

Ricardo Prudenciato

With a graduate degree in Information Technology and post-graduate work in Computer Networks, Ricardo Prudenciato has 20 years of career experience with FOSS. With a focus on support and administration of systems and their services, Ricardo has worked in senior positions leading and coordinating teams. He has contributed to organizaions small to large, such as IBM, Telecom, and Vivo.

In the past 5 years, Ricardo has taught and mentored more than 41,000 students. He has published courses on Introduction to GNU/Linux, Shell Script Programming, and Preparations for LPIC Certifications.

Timeline

Year	Event
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 1,400 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 exam 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
2023	Release of Security Essentials

How LPI filled the certification gap for FOSS

The spheres of certification and open source were long distinct. The strengths and importance of free and open source software were overlooked or cavalierly dismissed by commercial interests who drove certification programs, while the free communities welcomed anyone who could contribute code and claimed they could judge people by their contributions.

The entry of Linux into mission-critical applications and corporate environments in the late 1990s changed the equation. These pages lay out the history of Linux Professional Institute from its first conception to the present.

Back in 1998, Apple released the iMac and Microsoft released Windows 98. Unix was still a force on server computers, but Microsoft Windows NT was threatening to make major inroads into the server space.

On the other hand, Linux was rapidly becoming a growing phenomenon with millions of users worldwide. Upstart companies, such as Red Hat and SUSE, were attracting the attention of corporate users with their commercial packaging and support of Linux.

In the beginning…

In 1998, 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? At the time, there were a large number of certification programs for Microsoft Windows systems, providing guidelines for companies trying to understand someone's expertise with Windows. Could there be some similar kind of certification program for Linux?

Red Hat started to develop its own certification for its Linux distribution. Several other distribution vendors started to publicly discuss creating their own certifications. The fragmentation of these corporate efforts prompted some people within the Linux community to express concern that we might wind up with multiple small Linux certifications that wouldn't help advance the deployment of Linux as much as a common certification.

In October 1998, Dan York published in the Linux Gazette an article calling for a community Linux certification program, resulting in an active community discussion group. Dan would go on to write a series of articles that were noticed by Linuxcare, a startup offering Linux support. Linuxcare contacted Dan and employed him to build the certification program ultimately offered by LPI.

Meanwhile, a separate discussion led by Evan Leibovitch at the Canadian Linux Users Exchange promoted a similar initiative. Jon "maddog" Hall, President of Linux International, who knew both Evan and Dan, 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 "official training"
• psychometrically-validated
• multilingual and globally accessible

Making it happen

By the spring of 1999, the certification effort caught the attention of Benoy Tamang at Caldera, a Linux distributor, who was considering launching their own independent certification program. Benoy paid for Dan and Evan to meet with Caldera and make a pitch for funding. The day before the pitch—April 4, 1999—Dan and Evan ducked into the single meeting room of the La Quinta Inn in Orem, Utah and designed the three-tier program now known as Linux Professional Institute Certification. (Although 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 decided to cancel their own certification program in favor of becoming LPI's first corporate sponsor. Soon other sponsors, including IBM and SUSE, came on board.

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 from the very start. These five were the original incorporators of LPI.

The non-profit was officially incorporated in the province of New Brunswick, Canada, because Canada was considered to be politically neutral and because New Brunswick was one of the few

jurisdictions that allowed virtual board meetings in 1999.

Many in the Linux community liked the program that the nascent LPI was proposing. As an example, Jon "maddog" Hall became the first Platinum Individual Charter Sponsor by contributing 1,000 USD of his own money so LPI could deliver its first 200 tests.

The community expands

During this time, the entirely volunteer LPI team expanded to include people working on many different aspects of the program. The team performed an extensive "job-task analysis" to ensure that the exams covered the appropriate topics. Volunteers developed questions and ran them through beta-testing programs. Another group worked with VUE (later part of Pearson) to work out how to deliver the exams electronically through VUE's network of testing centers. (The VUE offerings became indispensable in 2020 when the COVID-19 pandemic ruled out in-person meetings.) Other volunteers worked on marketing and promotion, while yet others solicited donations and ensured the evolution of the organization's operations. All of this happening through email lists and occasional conference calls.

Going global

After the first Level 1 exams were delivered in 2000, followed by Level 2 in 2001, LPI started gaining international acceptance and community support. Like-minded groups quickly helped create local presences around the world, first in Japan and then in Germany and Brazil.

The Pearson VUE collaboration was not LPI's earliest effort at remote test delivery. Realizing that testing centers were not available in all parts of the world, and wanting to make LPI certifications as accessible as possible, the LPI team also developed a mechanism for delivering the exams on paper in a proctored setting. In October of 2002, Jon "maddog" Hall cooperated with 4Linux, an early supporter of LPI in Brazil, to deliver 101 paper exams in Sao Paulo while on a trip to Latin America.

In November 2003, LPI hosted more than 500 people at its exam lab at LinuxWorld Hong Kong, the largest of many such events. LPI has since certified people in more than 190 countries and territories and delivered exams in nine languages.

Later in 2003, LPI participated in the first-ever United Nations World Summit on the Information Society with a delegation of 23 people, promoting open source and distributing 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, LPI has launched new employment programs, continues to participate in open source conferences everywhere, and supports its partners in local advocacy efforts. Expanding the program offerings, Level 3 was offered in 2007.

LPI launched the introductory Linux Essentials program in 2012 and its DevOps certification in 2017. It began work with the BSD Certification Group in 2017, leading to the 2019 launch of the BSD Specialist program. Including BSD and DevOps in LPI certifications began the path of extending Linux vendor-neutrality into support for a broader scope of IT skills and professions.

Over time, the LPI network of partners has expanded in both numbers and geographic reach, now numbering more than 700 partners in more than 190 countries and territories. In 2015, the

Network Development Group (NDG) released the first in a series of courses, bringing LPI-focused education to the thousands of institutions and millions of students in the Cisco Networking Academy.

Community governance

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 would enable LPI-certified individuals to become Members of LPI, elect its Board, and help shape its direction.

Our first-ever Board election was held at the Board's Annual General Meeting in June 2021. As part of these 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.

In 2019, LPI introduced a learning portal that offered the first in a series of free study guides that assists students and trainers alike. During the COVID-19 years in the early 2020s, LPI started offering at-home certification exams using Pearson's OnVUE system.

In 2022, LPI started the Upgrade to Linux initiative, a multi-stakeholder program designed to address the needs of users unable to upgrade their computers to Windows 11 (offering a path instead to "Upgrade to Linux"). The project has

attracted Linux vendors, groups, and community participation from around the world.

Also in 2022 the Essentials track tripled its offerings, with the Web Development Essentials and Security certificates. New partnerships, certification programs, languages, accessibility initiatives, and free training materials are in the works.

In 2023, Open Source Essentials certificate beta exams were launched, empowering both FOSS and FOSS-adjacent professionals to prove their specialized knowledge of open source communities, businesses, licenses and legal environments, and culture to new employers.

LPI Learning Materials continue to grow in first-language accesibility worldwide, with translations added to Linux Essentials in Vietnamese, Bosnian/Croatian, and Hungarian.

Inspired by the Linux Club guide created by Stu Keroff, LPI began a program to connect educators with sponsors to cultivate FOSS and Linux education groups that support student and community development of open source skills.

LPI wants 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 supporting LPI founders during its early formation.