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LPI, BSD, WTF?

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Tuesday, December 13th, 2020

Agenda



- **Motivation and History**
- **Where We Are Today**
- **BSD Specialist Exam Details**
- **More Gory Details**



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Motivation and History

Motivation



- A non-profit organization founded in 1999 in Canada
- Almost 200,000 people hold at least one credential, globally recognized as fair exams and setting a high standard
- Mission is to help promote the use of open source, particularly in a professional setting
- BSD Operating Systems are open source and free software, so...

LPI and BSDCG



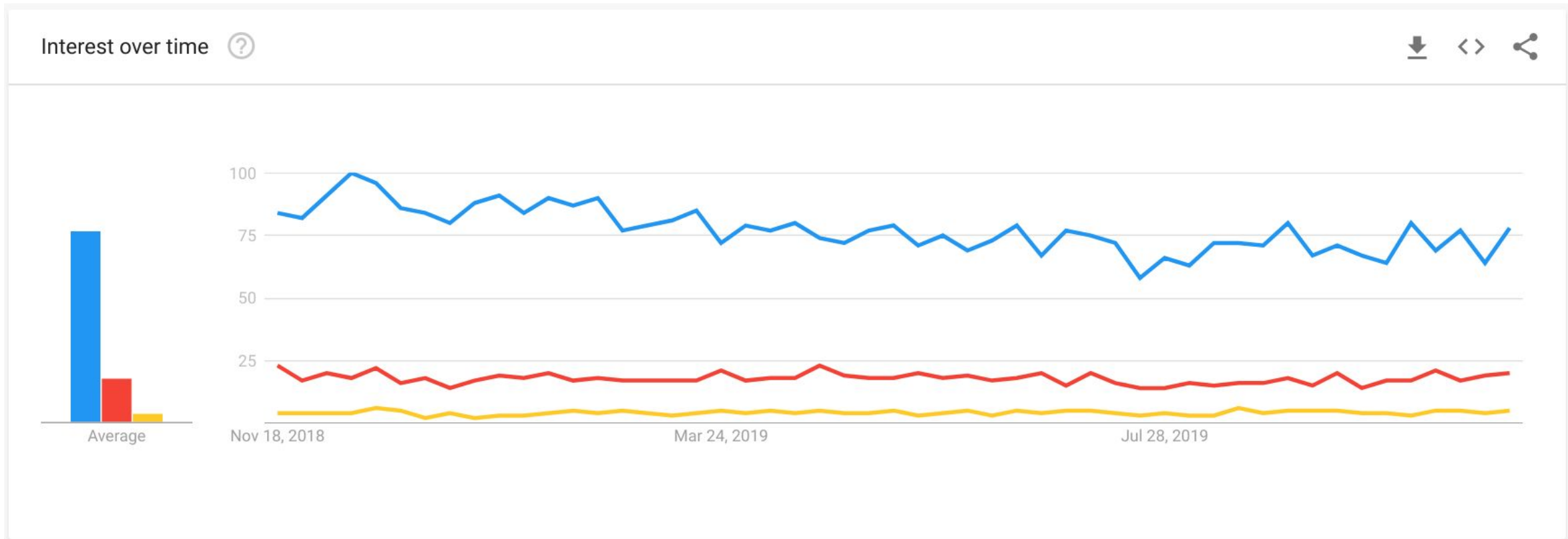
- In December 2017, the BSD Certification Group (BSDCG) joined LPI
- Continue maintaining the exam and increase its availability
- Delivery of the BSDCG BSD Associate (BSDA) exam stopped in 2018
- BSDA holders can migrate their credentials to LPI and will receive BSD Specialist upon request
- BSDA objectives and the exam format were reviewed and adjusted to accommodate the potential for higher level credentials
- QA and psychometrics for all questions
- Globally available through Pearson VUE
- BSD Advisory Committee created within LPI

BSD Specialist Target Audience



- Professionals working with any of the major BSD systems
- Focus is a technical skill set
- Candidate is most likely a server / data center administrator or support engineer
- More than one year practical experience managing BSD systems

BSD Market Relevance



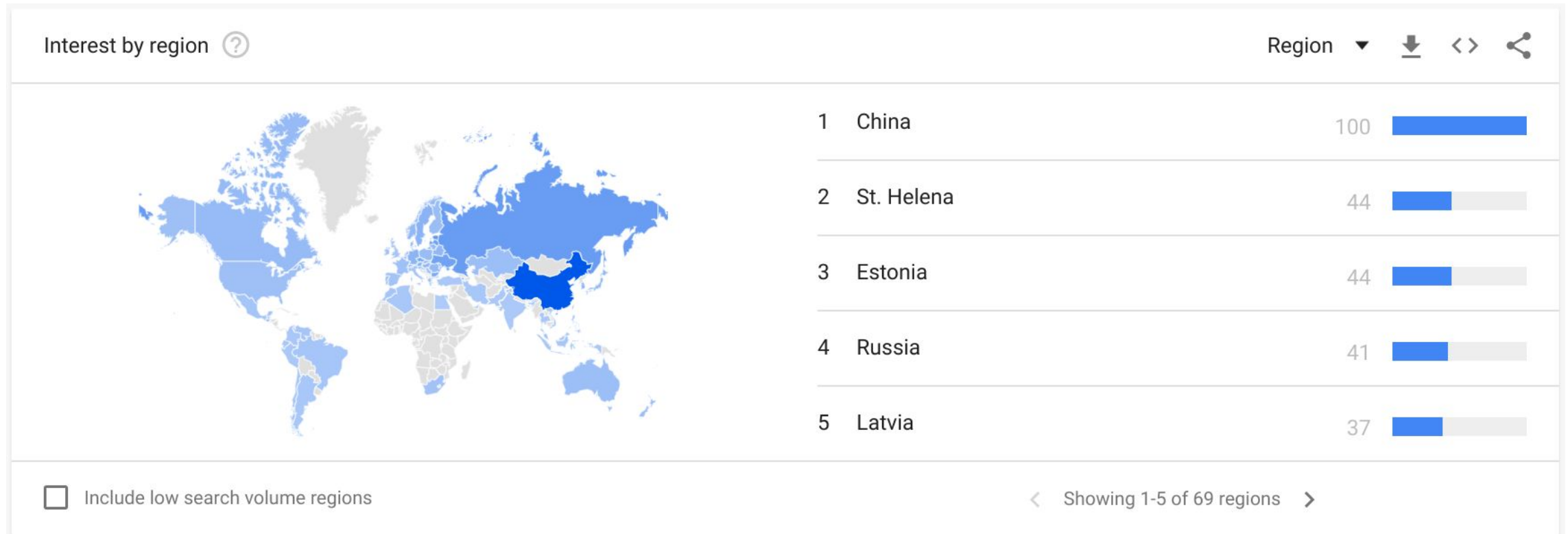
● Freebsd
Search term

● OpenBSD
Search term

● NetBSD
Search term

Data from Google Trends

BSD Market Relevance



Keyword: FreeBSD
Data from Google Trends



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Where We Are Today

Summary of Activities



- Developed an entry-level BSD focused credential
- Creating free learning materials for education programs (learning.lpi.org)
- Encouraging and helping all of our (~1,000) training partners to add it to their curriculum
- Have a BSD Advisory Committee, with its own budget and autonomy, more members are welcome
- Producing “content marketing” pieces to help attract interest
- BSD Specialist certification qualifies for membership

That’s the start! What else should we be doing to support BSD adoption?



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Questions?



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BSD Specialist Exam Details

BSD Specialist Minimally Qualified Candidate



The certification holder is a BSD system administrator. The certification holder has a solid understanding of the architecture of the BSD operating systems. This includes the ability to manage various aspects of a BSD installation, including user accounts and groups, processes, file systems, installed software and client networking configuration. Furthermore, the candidate is experienced in using standard BSD and Unix tools on the command line. The certification holder is able to apply these skills on FreeBSD, OpenBSD and NetBSD.

BSD Specialist Exam Format



- **Single exam**
- **60 questions**
- **90 minutes**
- **Question types:**
 - Multiple choice with a single correct answer
 - Multiple choice with multiple correct answers
 - Fill in the blank

BSD Specialist Objectives



- Topic 711: BSD Installation and Software Management
- Topic 712: Storage Devices and BSD Filesystems
- Topic 713: Basic BSD System Administration
- Topic 714: Basic BSD Network Administration
- Topic 715: Basic Unix Skills

BSD Specialist Objectives



Topic 711: BSD Installation and Software Management

- 711.1 BSD Operating System Installation (weight: 3)
- 711.2 BSD Software and Package Management (weight: 4)
- 711.3 BSD System Startup Configuration (weight: 3)
- 711.4 Hardware Configuration (weight: 2)
- 711.5 BSD Kernel Parameters and System Security Level (weight: 2)

BSD Specialist Objectives



Topic 712: Storage Devices and BSD Filesystems

- 712.1 BSD Partitioning and Disk Labels (weight: 2)
- 712.2 Create File Systems and Maintain their Integrity (weight: 1)
- 712.3 Control Mounting and Unmounting of File Systems (weight: 2)
- 712.4 Manage File Permissions and Ownership (weight: 3)
- 712.5 Create and Change Hard and Symbolic Links (weight: 1)
- 712.6 Find Files and BSD Directory Layout (weight: 2)

BSD Specialist Objectives



Topic 713: Basic BSD System Administration

- 713.1 Manage User Accounts and Groups (weight: 3)
- 713.2 Automate System Administration Tasks by Scheduling Jobs (weight: 2)
- 713.3 Maintain System Time (weight: 1)
- 713.4 System Logging (weight: 2)
- 713.5 Mail Transfer Agents (MTA) Basics (weight: 1)
- 713.6 Manage Printing and Print Jobs (weight: 1)
- 713.7 Manage User Sessions (weight: 1)

BSD Specialist Objectives



Topic 714: Basic BSD Network Administration

- 714.1 Fundamentals of Internet Protocols (weight: 2)
- 714.2 Basic network configuration (weight: 3)
- 714.3 Basic network troubleshooting (weight: 3)
- 714.4 Configure Client Side DNS (weight: 2)

BSD Specialist Objectives



Topic 715: Basic Unix Skills

- 715.1 Use the Shell and Work on the Command Line (weight: 2)
- 715.2 Perform basic file management (weight: 3)
- 715.3 Create, Monitor and Kill Processes (weight: 3)
- 715.4 Use Simple Regular Expressions (weight: 2)
- 715.5 Perform basic file editing operations (weight: 2)
- 715.6 Customize or write simple scripts (weight: 2)



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More Gory Details

BSDA to BSD Specialist Migration



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- BSD Specialist has fewer questions in less time than BSDA
- More types of questions to also test transfer knowledge and application of skills
- No grace period, BSDA was already discontinued
- BSDA holders can migrate their credential to LPI to maintain it
- Upon request, BSDA holders receive the BSD Specialist credential to become an LPI member
- BSDA holders are contacted directly by LPI for this offer

BSD Specialist in LPI's Program



- No requirements or dependencies to become BSD Specialist
- BSD Specialist does not extend any other certifications
- Single exam
- Certification is active for five years
- BSD Specialist holders are qualified for LPI membership
- BSD Specialist complements the DevOps Tools Engineer certification as well all LPIC certifications

BSD Specialist Learning Materials



- Learning material development was set up
- Significant parts will be reused from LPIC-1
Review and approval still necessary
- Other parts have to be created
i.e. installation, software management and hardware configuration
- Original BSD documentation is well structured and comprehensive
- **We are still looking for additional authors and reviewers with a BSD background**

BSD Specialist USPs



- Linux Professional Institute credentials are globally recognized
- LPI stands for fair exams, high standards, strong QA and psychometrics
- The exams follow a well-known format
- The objectives are developed publically in a community-based approach
- The objectives define an initial set of knowledge to get started with BSD
- BSD Specialist is the only BSD-specific certification
- Globally available through Pearson VUE
- The certification qualifies for membership