

# BSD Certification: Applying Open Source Principles to Technical Certifications

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# Outline

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Our Approach

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Update on BSDA Certification

Update on BSDP Certification

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# The Certification Dilemma

Popularized in mid-90s by Novell, Microsoft, Cisco  
--still primarily the domain of vendors pushing  
adoption of proprietary products

Negative associations with braindumps, "paper"  
MCSEs, and recertification "money grabs"

Very expensive to launch--domain of large,  
established companies with alternate revenue  
streams who can afford to wait ~2 yrs before  
certification program starts making money

# The Certification Dilemma

Many certification programs are not psychometrically valid or inline with reality--studying often becomes memorizing what the vendor wants you to think about their product

Few certification programs are accredited, which can lower their value to employers--certifications that are perceived as valuable are often more about "hot topics" than educational/skills value



# The Certification Dilemma

Few certifications are integrated into post-secondary diploma programs

Training for certification exams is often boot-camp style (you can't learn how to become a sysadmin in a week, no matter how good the training is!)

Boot camp training assumes you already have the skills and want to brush up on what to know for the exam; some vendor's bootcamps are needed to pass the exam!

# The Certification Dilemma

Online exam delivery costs: \$75,000 USD annually to participate, extra fees for changing exam

Monopoly on exam delivery (VUE/Prometric) --this is just starting to change

Exam delivery software is proprietary, currently no open source delivery solutions exist

To go beyond multiple choice, exam organization must create their own lab-based software (usually flash based) or provide their own testing lab

# Our Approach

## **Community Based:**

Involve those who understand the value and can benefit from the assessment:

- working sysadmins or those looking for employment
- those who hire/manage them
- trainers/professors
- those who advocate the use of BSD

# Our Approach

## **Practical:**

Assess real world, on the job skills by working closely with employers and sysadmins

Assess experience, not the capability to learn or memorize exam questions--this is why we do not provide sample test questions and instead provide a comprehensive Command Reference for the Exam Objectives

Quality over quantity: we prefer providing a quality assessment to selling a large amount of exams



# Our Approach

## **Psychometrically Valid:**

Exam assesses skills, not ability to understand what is being asked

Exam is fair, unbiased, and understandable even if English is not your first language

Exam matches exam objectives and is delivered in a trusted, proctored environment

Use of ongoing metrics keeps questions current and spots anomalies

# Our Approach

## **Use Open Source Software/Principles:**

For infrastructure and exam delivery solutions

Remains separate from, but supports the other BSD projects and Foundations

Planning/work is transparent and occurs over mailing lists, IRC, and social media sites

Anyone is welcome to comment and get involved

# Our Approach

## **Accessible:**

Aim to be available globally

Where practical, available in local language

Affordable globally (\$75 USD)

Encourage local study groups and creation of training materials (both open and commercial)

Advocates the integration of exam objectives into existing diploma programs

# Other Certification Organizations

**Are there other "open source" certifications?**

LPI started out as community based and psychometrically valid, current focus is commercial

Other certification bodies: Zend for PHP, EnterpriseDB for PostgreSQL, Canonical for Ubuntu, Novell for SUSE

Other open source communities (Apache, Gnome, Drupal, OpenOffice) have expressed interest

Cost, time, and expertise are huge barriers



# BSDA

Available Since: February 2008

Target audience is junior sysadmin with 6 months experience

Covers 7 knowledge domains

Scored for 100 questions

Passing score is 500 of scale between 200 and 700

# BSDA

>1900 BSDCG IDs issued (residing in 107 countries)

237 have taken exam (residing in 21 countries)

130 have passed exam (some not scored yet)

average score: 67%

# BSDP

JTA Report published March 2010:

[http://www.bsdcertification.org/downloads/BSDP\\_JTA\\_Report.pdf](http://www.bsdcertification.org/downloads/BSDP_JTA_Report.pdf)

Exam Requirements published August 2010:

[http://www.bsdcertification.org/downloads/certreq\\_bsdp\\_en.pdf](http://www.bsdcertification.org/downloads/certreq_bsdp_en.pdf)

SME sessions planned during MeetBSD California and NYCBSDCon (for both in-person and on-line)

# BSDP

Exam delivery will have 2 components: a paper based exam and a virtualized lab-based environment

Consideration for the BSD Professional Exam:  
[http://www.bsdcertification.org/downloads/bsdp\\_thoughts.pdf](http://www.bsdcertification.org/downloads/bsdp_thoughts.pdf)

Audience: senior admins with 3-5 yrs experience

# of Study Domains: 11

Available: 2011?



# ANSI/ISO/IEC 17024

Globally recognized accreditation

Required by some governments and military

Validates validity of exam and processes of certification body

<https://www.ansica.org/wwwversion2/outside/PERgeneral.asp?menuID=2>

# ANSI/ISO/IEC 17024

Time intensive: 12-18 months of "boring" process creation and documentation

Expensive: ~\$20,000 in initial auditing fees and ~\$5,000 annual auditing fees

Comptia, GIAC, ISACA, and Microsoft are accredited, Cisco is in process

# Future Efforts

Build network of trusted testing centers

Work towards an open source online solution in a proctored environment (or find affordable existing solution)

Translate exam objectives to more languages

Build a body of freely available study materials

# Future Efforts

## **Possible Future Exams:**

PF

Desktop Administration

Embedded BSD

Global Enterprise



# Resources

<http://www.bsdcertification.org>

<https://register.bsdcertification.org/register/events>

[http://www.facebook.com/group.php?  
gid=55432547309](http://www.facebook.com/group.php?gid=55432547309)

<http://www.linkedin.com/groups?gid=1600767>

# Resources

Video about BSD Certification:

<http://www.archive.org/details/BsdCertificationGroupACaseStudyInOpenSourceCertification>

Contact:

[chair@bsdcertification.org](mailto:chair@bsdcertification.org)

URL to slides online:

<http://www.slideshare.net/dlavigne/eurobsdcon-2010>