

# Update on BSD Certification

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# Nice to be back in Kraków :-)

Very first presentation on BSD Certification was at MeetBSD 2005 (3 months after BSDCG was announced)

This talk will provide an overview of what has happened since then

# Outline

Certification 101

Our Goals

BSD Certification Group (BSDCG)

BSDA (BSD Associate)

BSDP (BSD Professional)

Works in Progress

How You Can Help

# Certification 101

Popularized in mid-90s by Novell, Microsoft, Cisco

Associated with braindumps, paper MCSEs

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

# Why so Expensive?

**Really, how hard is it to create an exam?**

SMEs, psychometricians, accreditation, curriculum developers, creators of training materials...

Then you have to provide a way to deliver the exam to the exam candidate (software, proctors)

# Certification 101

Traditional 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

# Certification 101

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

LPI started out as commercial/community based, 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) have expressed interest

Cost, time, and expertise are huge barriers

# Our Goals

## 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 use of BSD

# Our Goals

## Practical

- assess real world, on the job skills
- 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

# Goals

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

- for infrastructure
- for exam delivery solutions
- planning/work is transparent and occurs over mailing lists, IRC, and social media sites
- anyone is welcome to comment and get involved

# Goals

## **Accessible**

- available globally
- where practical, available in local language
- affordable globally

# Goals

## **Psychometrically Valid**

- exam assesses skills, not ability to understand what is being asked
- exam is understandable even if English not first language
- exam matches exam objectives
- exam is delivered in trusted, proctored environment

# BSDCG

Registered non-profit incorporated in the state of New Jersey in 2005

Mission is to create and maintain certifications to assess skills of BSD system administrators

Community based with a legal governance infrastructure

Relies on open source methodologies and volunteer contributions of time and money

# BSDCG

## Internal Structure:

5 Board of Directors (voted in for a term)

18 BSDCG members with voting rights (volunteer to join)

5 Advisory Board members (invited)

9 SMEs (subject matter experts)

1 (paid) psychometrician

Network of trusted exam proctors

# BSDCG

## Community Structure:

~700 subscribers to 2 mailing lists

229 members of 2 LinkedIn groups

~90 translators for 22 languages

Donated hardware, bandwidth, system administration, and web development

Ongoing relationships with other certification bodies and educational institutions

# BSDCG

## **Community Based:**

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

Works closely with employers and sysadmins to keep exam current and “real”

Advocates the integration of exam objectives into existing diploma programs (rather than bootcamp style learning)

# BSDCG

## **Psychometrically Valid:**

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

SMEs who are working sysadmins keep the exam practical

Use of ongoing metrics keeps questions current and spots anomalies

# BSDCG

## **Exam goals:**

Globally affordable (\$75 USD)



Available in local community, and where warranted, in local language

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

# BSDA

## **Process:**

Job Task Analysis (JTA): April - July 2005

Exam Requirements published: October 2005

Beta Period: May - August 2007

Angoff Session: January 2008

Available Since: February 2008

# BSDA

## **Exam:**

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

## **Venue:**

Community based: exam events hosted by conferences, user groups, employers, and schools

Slowly building a network of trusted testing centers who promote BSD (FreeBSD Brasil)

# BSDA

## **BSDA Candidates:**

>1700 BSDCG IDs issued (residing in 107 countries)

195 have taken exam (residing in 21 countries)

124 have passed exam (some not scored yet)

average score: 67%

# BSDP

## Process

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 document currently a work in progress:

<http://bsdwiki.reedmedia.net/wiki/BSDP.html>

Need reviewers for Exam Requirements and SMEs to help write the BSDP exam and lab questions

# BSDP

## Process

Exam Requirements should be finished and published in late July or early August

Beta Period to Angoff Session to exam release is another 3-6 months

Interesting part will be finishing the development and testing of the virtual lab and providing the lab globally

# BSDP

## Delivery

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/bsd\\_p\\_thoughts.pdf](http://www.bsdcertification.org/downloads/bsd_p_thoughts.pdf)

# BSDP

**Audience:** senior admins with 3-5 yrs experience

**# of Study Domains:** 11

**Format:** both paper- and lab-based

**BSDP JTA Survey Report:**

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

**BSDP Exam Objectives:** to be published late July or early August

# Works in Progress

## **Complete BSDP:**

Finish and publish the exam objectives

Write and review exam questions

Offer beta exam

Angoff session to set passing score

Offer the exam

# Works in Progress

## **Improve Availability:**

Build network of trusted testing centers

Work towards an open source online solution in a proctored environment

# Works in Progress

## **Study Materials:**

We need help creating study materials!!!

Wiki is available for user generated content

Exam objectives translated to more languages  
(currently English, Russian, Spanish)

Creation of study labs

Formation of study groups

# Works in Progress

## **Accreditation:**

ISO/IEC 17024 is globally recognized

Required for some governments and military

Validates validity of exam and processes of certification body

# Works in Progress

## **Possible Future Exams:**

PF

Desktop Administration

Embedded BSD

Global Enterprise

# How You Can Help

Help us review the BSDP Exam Requirements  
<http://bsdwiki.reedmedia.net/wiki/BDSP.html>

Spread the word—tell your school, employer, user group, write an article, blog, twitter, etc.

Read our publications

Take the exam!

Donate \$ (e.g. purchase study DVD)

# 2008 Revenue/Expenses

Exam Sales:	4,459.16
DVD Sales:	4,941.00
Donations:	25.00
<b>Total Revenue:</b>	<b>9,425.16</b>

Shipping:	1,033.60
Paypal Fees:	771.04
Psychometrics:	8,592.92
Supplies/fees:	1,970.12
<b>Total Expenses:</b>	<b>12,267.68</b>

# How You Can Help

Host or proctor an exam event

Become an SME

Help us develop an open source exam delivery solution

Help us create training materials or donate existing materials

Incorporate exam objectives into training programs

# 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/meetbsd-poland-2010>