BSD Certification

Dru Lavigne
Edition for meetBSD 2005

When and why the Group was formed:

The BSD Certification Group was formed in January of 2005 and publicly announced its formation in a press release on March 15, 2005.

Which members comprise the Group:

The Group itself is comprised of 18 members who are actively involved within the BSD community. There is a skill mix of BSD system administrators, committers, authors, and educators and a representation from each of the four major BSD projects. The Group members are:

Richard Bejtlich: author and trainer using FreeBSD as a reference platform for security monitoring

Jim Brown: BSD systems administrator and consultant

Johnathan Drews: FreeBSD ports maintainer and current BSD Certification Group secretary

Hubert Feyrer: NetBSD committer; his doctoral thesis is a training system for Unix systems administrators

Luiz Gustavo: launcher of www.MyFreeBSD.com.br, manager of BSDemRevista magazine and co-organizer of BSDCon Brasil

Dan Langille: creator of FreeBSD Diary, FreshPorts, FreshSource and BSDCan

Dru Lavigne: O'Reilly author, certification trainer and BSD systems administrator; current chair of the BSD Certification Group

Scott Long: FreeBSD committer, developer and Release Engineer

Jean Milanez Melo: coordinator of the FreeBSD pt-br documentation project, moderator of Brazil's FreeBSD mailing list, creator of the Brazilian FreeBSD FAQ and organizer of BSDCon Brazil.

Wes Peters: FreeBSD core team member and software engineer for BSD-based information appliances
Jeremy Reed: NetBSD developer, BSD trainer and maintainer of the BSD newsletter

David Rhodus: core team member and developer of Dragonfly BSD as well as CTO of Firefly BSD Inc.

Eduardo Ribeiro: teaching director of OpenIT and cofounder of MyFreeBSD

John Richard: BSD systems administrator and IT instructor

George Rosamond: BSD systems administrator, founder of NYC*BUG, writer for DaemonNews and current Contact Coordinator for the BSD Certification Group

Brad Schonhorst: BSD systems administrator, technical writer and trainer, and current maintainer of *BSDTracker

Marc Spitzer: BSD systems administrator, cofounder of NYC*BUG and LispNYC and board member of UNIGroup

Patrick Tracanelli: founder of FreeBSD Brasil LDTA which provides FreeBSD support, consulting and training; current Translation Coordinator for the BSD Certification Group

The Group is also forming an Advisory Board separate from the Group. The Advisory Board is comprised of a group of more senior voices in the Unix community who can provide advice and wisdom on specific issues from time to time. Advisory board members will include Michael Karel, Greg Lehey, Marshall Kirk McKusick and David Maxwell. More information on the Advisory board will appear on the website sometime in June.

The Group's goals:

The Group has created a mission statement which states:

"The BSD Certification Group is a volunteer collaboration of computing professionals who promote the awareness and use of BSD operating systems. Our mission is to create and support a standardized certification process to assist system administrators and employers validate competence in the implementation of BSD best practices."
To break that statement into concrete goals, the Group has set out to:

• define which certification(s) will best serve the BSD community and assist in advocating BSD in the marketplace
• for each defined certification, publish a clear list of exam objectives and the study materials available to assist the testing candidate in mastering those objectives
• create and maintain a body of testing questions
• research, define, and implement a testing methodology that is credible and available globally

The Group also has some philosophical goals:

• as much as possible, involve the BSD community
• where possible, use Open Source solutions

What has been done so far and what still needs to be done:

The BSD Certification Group has divided the work required to create a certification standard into stages. Here are the stages which have been defined so far:

1) Planning and Preparation Stage (January 4, 2005 - March 15, 2005)
• Group formed and discussed rules of governance
• private mailing list, twiki and IRC channel created for Group use
• mission statement created and goals defined
• public discussion mailing list created
• public website created

2) Public Announcement Stage (March 15, 2005 - April 20, 2005)
• press release released to BSD mailing lists and BSD news sites
• feedback received from BSD community and responded to
• translation teams organized and translation twiki created
• media team organized and first brochure released
• monthly Newsletter established and first edition released
3) Information Gathering Stage (April 21 - July 15, 2005)

Task Survey Analysis launched in: English, Brazilian Portuguese, Dutch, French, German, Polish, Russian, Simplified Chinese, and Spanish

- analysis of the completed English survey began on May 23

A roadmap detailing the remaining stages and estimated time frames will be published on or around July 15, 2005.

Preliminary results from the English version of the Task Analysis Survey:

A more detailed analysis will be publicly available, probably sometime in July. Here are some of the initial findings from the recently closed English version of the survey.

Job Roles:

- System/network administration: 65.9
- IT manager: 6.5
- IT supervisor: 4.1
- Educator/trainer: 3.7
- Student: 18.5

BSDs used at current place of employment or school (respondents could choose all that apply):

- DragonflyBSD: 5.4
- FreeBSD: 70.7
- NetBSD: 17.9
- OpenBSD: 48.7

Number of respondents per Country (those with an * indicate there will be more respondents from a non-English version of the survey):

- Argentina: 3
- Australia: 12
- Austria: 4
- Azerbaijan: 2
- Belarus: 3
- Belgium: 10
- Belize: 1
- Bosnia and Herzegovina: 1
- Brazil: 5 *
- British Indian Ocean Territory: 1
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Age Groups:

Under 21: 8.4
21-30: 56.9
31-40: 26.7
41-50: 5.6
51-60: 1.3

How well known is BSD in your area?

I'm the only person I know who's heard of it: 18
Only the technically elite are aware of it: 381
It's about as popular as Linux: 56
It's about as popular as Windows: 3

How many exams should be defined?

One 9.9
Two 38.6
An exam track 42.5
Other 6.5

An entry level exam should cover (respondents could choose all that apply):

Generic Unix knowledge 76.5
The differences between Linux and BSD 39.0
Concentrate only on BSD 38.1
Test all the BSDs 29.3
Cover only one BSD 13.8

Targeted audience if only one BSD exam:

BSD novices 6.5
Unix admins with limited BSD experience 20.5
Experienced BSD users with limited admin 24.8
Experienced BSD admins 41.4

Exams to be considered for an exam track (respondents could choose all that apply):

Configuring Internet servers 88.4
Securing BSD systems 89.7
Administering BSD desktops 55.4
Advocating BSD 23.7
Other 11.6
Should an exam targetted at the experienced BSD administrator:

Require specific configuration knowledge  21.1
Require conceptual knowledge             74.6

Testing methodology (respondents could choose all that apply):

Multiple choice and fill in the blanks 35.3
Mix of multiple choice and hands-on     73.9
Hands-on task-based                      45.0
Component requiring documentation       17.7
Other                                    3.9

Test proctoring environments (respondents could choose all that apply):

Vue/Prometric                            51.9
Approved educational institutions        70.7
IT conferences                           46.6
Other                                    8.4

Should the exam be available in languages other than English?

Yes                                      44.0
No                                       52.2

Looking ahead:

The work of the BSD Certification Group has just begun. Looking ahead, the Group will:

• analyze and publish the results of the Task Survey Analysis
• assist in the creation and publication of white papers, success stories and other promotional material
• gather contacts for testing centers and training institutions throughout the world

What you can do to help:

The BSD Certification Group strives to keep the BSD community involved in and informed about the evolving certification standard. While the Group itself is responsible for establishing and maintaining the standard, there are many concrete things you can do to assist in the certification effort:
Let us know what it is happening in your BSD community:

The Task Analysis Survey was a formal information gathering tool, but we are always interested in hearing from others who use, administer and advocate BSD. For example:

• what misconceptions or stumbling blocks do you have to address when trying to implement BSD solutions?
• which specific skills do you perceive as being part of the required skillset of a competent BSD adminstrator?
• if you’ve written other IT certifications, which testing approaches in your opinion proved competency? which testing approaches should be avoided?
• do you have contacts within your local or regional government or educational institutions that you'd like to be aware of BSD?
• do you know of existing BSD training materials you'd like to see integrated into the standard?
• do you have a BSD success story that you'd like to see used to advocate the use of BSD or the advantages of having a certified BSD administrator?
• do you have suggestions on how to improve the website or any of the advocacy materials?

If you do, let us know!

Spread the word:

Start by ensuring your local BSD community and user group is aware of BSD certification and how they can contribute to the effort.

Approach your local educational institutions and make them aware of the upcoming certification.

If you'll be manning a booth at an IT event, hand out copies of the brochure and give us feedback.

Join one of the mailing lists:

Occasionally the Group has specific needs and solicits input from the community via an email to the mailing lists. This is the most efficient way of keeping up-to-date with the project’s status. Don't forget, you can contact the Group at any time with your own ideas or offers of assistance by using the contact form on the website.

http://www.bsdcertification.org