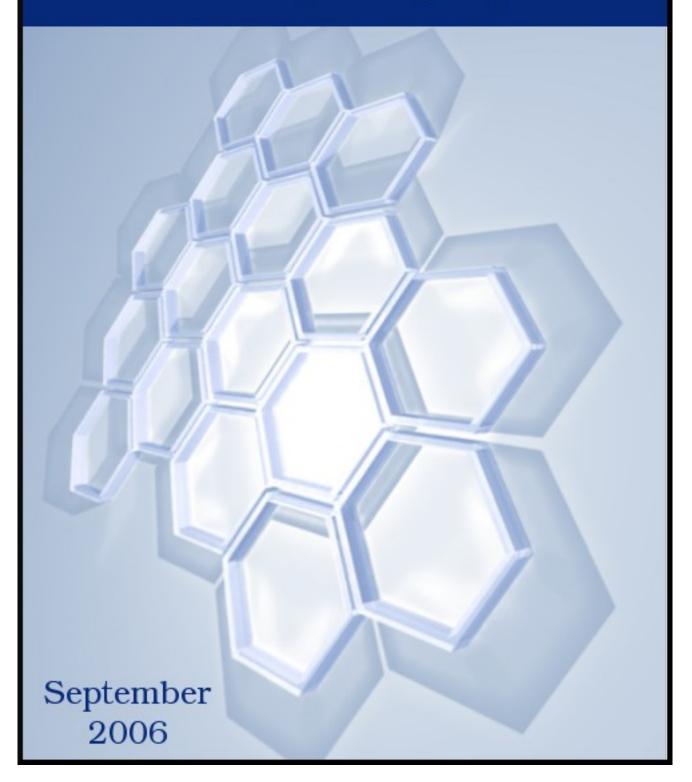
BSD Certification Group Test Delivery Survey Report



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Preface

The BSD Certification Group Inc. (BSDCG) was formed in 2005 to create the standard for certifying system administration skills on the BSD family of operating systems. As part of their research into effective and affordable mechanisms for delivering certification exams, the BSDCG launched a survey to gather input from prospective exam candidates. This Test Delivery Survey, available between July 10 through August 12, 2006 for most translations and August 6 through September 2, 2006 for the Spanish translation, gathered statistics regarding geographic location, desired test delivery mechanism, and desired certification exam price. This Report contains the results from all translated versions of that Test Delivery Survey.

The BSD Certification Group would like to thank those who offered suggestions during the creation of the survey, those who translated the survey into other languages, those who announced the survey to interested forums, and those who completed the survey. Your assistance and insights have provided valuable material which can be used in the creation of a successful certification exam.

> The BSD Certification Group Inc. <u>www.bsdcertification.org</u> September 11, 2006



Executive Summary

his report contains the results and a brief analysis of the Test Delivery Survey which was conducted by BSD Certification Group Inc. to gather input from potential test candidates regarding their needs and preferences when taking certification exams.

The Test Delivery Survey ran from July 10 through August 12, 2006 for most translations and August 6 through September 2, 2006 for the Spanish translation. Nearly 1400 responders in 7 different languages completed the survey. Section 1, **"Introduction"** provides an overview of test delivery solutions for delivering IT certification exams.

Section 2, "**Survey Results**", contains the results to the survey's 17 questions--including in which country and city candidates would prefer to take their exam and which advantages candidates perceived for having the exam available using a commercial testing solution, a custom testing solution, or a paper-based exam. Section 2 also includes all of the comments left by responders. These provide valuable insight into how responders feel about certification exams in general and test delivery methods.

Section 3, "**Concluding Remarks**" summarizes the survey results and provides a list of requirements for a test delivery solution, whether that be an existing commercial or a custom based solution.

The BSD Certification Group encourages any individual or organization who uses or provides skill assessment training or skill assessment through certification exams to use the survey data in their own material, providing they credit BSD Certification Group Inc. as the originating source of the data. Suggestions for future surveys are also welcome and can be submitted using the contact form at the BSD Certification Group's website.



1 Introduction

certification Part of creating а standard is determining the best way to deliver the assessment exam. This can be challenging when testing candidates are spread throughout the globe. How do you ensure proctored environments are available in the countries and cities where testing candidates are located? How do you determine a fair price point which doesn't make the exam "out of reach" for certain economic regions? How do you ensure the integrity and security of the exam when testing locations are scattered throughout the globe? These are all important considerations when choosing a test delivery solution.

As IT certifications began to emerge in the 1990's, several proprietary and

What about online examinations?

It is important to make the distinction between computer based exams which are taken at an approved testing center and having the exam available online from any location.

While online exams offer affordability and availability from any geographic location, they can't offer two important qualities necessary to "certify" skills. The first is assurance that the person who registered for the exam is the person who actually took the exam. The second is control over the exam environment; for example, ensuring that the exam candidate does not use a web browser or man page to look up the answer to a question during the exam.

Taking the exam at an approved testing center requires a test candidate to prove their identity using government issued photo ID and to take the exam in a proctored and controlled environment.

Open Source software solutions were developed for delivering exams. At the same time, authorized testing centers were created to provide a secure and proctored environment for exam candidates. After a series of mergers and buy-outs, two companies have emerged as the key players in the current test delivery market: <u>Pearson VUE</u> and <u>Thomson Prometric</u>.

When the BSD Certification Group Inc. began to research the availability and costs of existing test delivery mechanisms, several points began to emerge:

- There are very few (basically two) available commercial solutions.
- There are no currently viable Open Source solutions.¹
- The commercial solutions require an expensive annual fee and impose additional costs known as publication fees when modifying exams or adding exam translations.
- 1 The projects which were started in the 1990s were either abandoned before 2000 or were incorporated into commercial solutions.



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- The commercial solutions are based on volume, making it difficult to set an affordable exam price for low-volume exam markets.
- While the commercial solutions provide 1000s of testing centers throughout the globe, they do not provide centers in all countries or all major cities.

The costs and restrictions imposed by the current test delivery reality have proven problematic to the BSDCG for several reasons:

- When compared to commercial certification exams such as those offered by Microsoft or Cisco, the BSDCG's exam market can be considered to be low-volume.
- The BSDCG intends to keep its exams current, but each change in the exam requires the re-payment of a publication fee.
- The BSDCG intends to provide as many translated languages as required by the global BSD community—again, each translation would require a separate publication fee.
- Keeping the exam globally affordable is an important goal to the BSDCG.
- Using Open Source, where feasible, and reducing the costs associated with creating exams so that examination fees can be redirected to benefit the BSD community are important goals to the BSDCG.

Accordingly, the BSDCG has seriously considered reviving or creating from scratch a custom delivery solution which better addresses these goals. It is obvious that gathering input from the BSD community and potential testing candidates is an important step in determining if the existing solutions are "good enough" and, if they are not, what features should be incorporated into a custom test delivery solution.

1.1 Results and Validity

Neither the survey itself nor this report pretend to be an exhaustive or completely accurate analysis regarding the methods available for taking certification exams. A great deal of effort on the part of many individuals went into the creation, collection, and analysis of the survey results. Even so, the BSDCG makes no claim on the accuracy of the results or how these results are interpreted by the wider computing community.



When using and interpreting the survey results, please bear these points in mind:

- No attempt was made to control who completed the survey or to ensure the survey was equally distributed throughout the globe for each translated version of the survey. The existence of the survey was advertised via email to the various BSD projects' advocacy mailing lists, the <u>bsdcert</u> discuss and announce mailing lists, BSD related news sites and forums, and word of mouth.
- This survey experienced an interesting "slashdot effect". <u>Slashdot</u>, one of the most widely read English news sites refused to publish the survey announcement; however, <u>Heise</u>, one of the most widely read German news sites, did publish the announcement. This resulted in the German version of the survey being the most widely publicized, making it appear that the majority of interested test candidates are from Germany. The BSD Certification Group is investigating ways to achieve a more uniform news distribution system and to have an alternative forum for each language in the event a site is unable or unwilling to distribute a news release.

1.2 Results and Certification Efforts

The results from the Test Delivery Survey indicate that test candidates are open to the idea of a custom test delivery solution but are least interested in taking a paper based version of the exam. One hundred US dollars is the maximum price most testing candidates are willing to pay, though the majority are willing to travel between 50-100 km to take the exam.

The survey also provides a picture of the typical candidate who is interested in BSD certification. The majority of testing candidates are male, between the ages of 21 and 30, and are currently working full-time in the IT field. Testing candidates are also spread across the globe, with responders from over 350 cities in 58 different countries.

Armed with the geographic locations of the testing candidates and the price that market will bear, the BSD Certification Group can work towards an exam delivery solution which meets the needs of its testing community.



2 Survey Results

This portion of the report contains the responses to the 17 questions asked on the Test Delivery Survey. The survey was available in the following languages:

- Brazilian Portuguese
- English
- French
- German
- Italian
- Mexican Spanish
- Polish

A total of **1387** responders completed the survey. Table 2-1 breaks down the number of responders per translated version of the survey.

Table	2-1:	Number	of Responders
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Language	Number of Responders				
Brazilian Portuguese	82				
English	362				
French	46				
German	682				
Italian	9				
Mexican Spanish	37				
Polish	169				
Total:	1387				



2.1 Question 1: Will you take the exam when it becomes available?

The first question was used to determine if the responder was interested in taking a BSD certification exam. Figure 2.1 shows the merged results from all of the translated surveys. One should note that all of the figures in this Report are screenshots taken from the survey's software interface. This interface always shows the total number of responders, even if some responders chose not to answer the question.

1. Will you take the exam when it becomes ava	ilable?						
Yes	83.1%	(1153)					
No	—— 15.9%	(220)					
TOTAL	99.0%	1387					
Figure 2.1							

Table 2-2 shows the results for the same question by each translated version of the survey.

Table 2-2: Will you take the exam?

Language	Yes	No
Brazilian Portuguese	78	3
English	312	49
French	43	3
German	521	153
Italian	8	0
Mexican Spanish	33	4
Polish	158	8
Total:	1153	220
Total as a percentage:	83.97%	16.03%



2.2 Question 2: If 'No' to Question 1, please explain why not.

This was the only question on the survey which accepted user comments and many responders took the opportunity to describe their opinion regarding certification exams.

All comments have been included as-is. The only edits were to ensure each comment started with a capital letter and ended with a period for consistency, and mis-spellings were corrected. Comments from the translated versions of the survey were translated by the translation teams for those languages.

Comments are useful as they point out the concerns of the community, some of which the BSD Certification Group may be able to address. These concerns include worries that the exam may not be available in certain geographic regions, that the exam may be too expensive to be affordable, and that the exam may not be seen as valuable to employers.

- A better answer for me would be "Maybe, but it's unlikely, especially any time soon." When I first heard of BSD Certification, I thought it was a pretty neat idea, because I was pretty certification-hungry at the time, and I felt certifications were useful and important. I have since become less convinced that certifications matter particularly, and am really only interested in investing time or money or whatever else in certifications with a proven influence. I will take the BSD certification if I feel it is or will be come a recognizable, influential indicator of my proficiency with widely used or respected tools, and if I feel that I need such a thing. The price I'm willing to pay for the exam, the distance I'm willing to travel, the amount I'm willing to study, etc. will all depend on how useful I feel the certification to be.
- Actually, my choice would have been "maybe".
- Because its worthless and stupid. Microsoft and Cisco certs only matter because stupid managers recognize those names. They do not recognize BSD, so the only people who care about certs (dumb managers) won't care about this one.
- Because question #1 lacks a "probably" option.
- Certifications are useless.
- Currently not applicable to my career path. Future changes may change my response.
- Don't know much about BSD.
- Experience is rated over "certifications" made worthless by the likes of MS.
- I first have to see how the certification will "boost" my skills and have added value to get me a job.



- Generally, I can't afford the exam fees.
- I am desktop user.
- I am not active in professional systems administration anymore, so the exam is not critical for job advancement.
- I am not necessarily sure it is needed, I'd definitely look at it but how viable it comes would sway my position. I've never been a big fan of certifications and have been able to get a job without a cert. I appreciate the work and really hope it does become viable, as it will bring attention to the community.
- I can't afford it, nor can I afford to travel.
- I can't afford the travelling to other country.
- I don't have enough money.
- I don't need a cert to be qualified to use BSD. I feel that hands on practical experience is more important than a cert.
- I don't think it suits my particular needs.
- I have been using FreeBSD on a single|local computer, using NFS on rare occasions. Since I lack practical|hard experience in Unix system administration, even after passing the exam I will most likely be not hired as a Unix SA. 3X?
- I have moved into a career field where the exam would not benefit me (I am an educator). While I still use and maintain several BSD systems (Free and Net) the few people I work for have no interest in whether or not I am certified... only that their computers continue to work like they have for years.
- I need more training.
- I rarely see companies wanting BSD experienced people. I do certs to raise my market value. I did LPIC-1 when it came out, and although more than 100K people are certified, companies still don't know about it.
- I see no reason to make BSD Certification a for profit item. Should be able to take test through some website for free or very low price like \$5.00 or \$10.00. Any thing else makes you look like you are in it to make money which is not what BSD is all about. Put exam on Internet or forget the whole idea.
- I think BSD people are hired because they are BSD people. They are so rare that the employer knows them by name, and hire them because they are BSD people. If a company is looking for a "network admin" a BSD certification would not be required. If a company is looking for a "Linux admin", they will find a lot of people, and a certification is a good way to shrink the number. If someone is looking for a "BSD admin", they will find a few names, and they will pick up what they prefer based on stuff like previous experiences, age, salary requests.
- I would like to see how it is received and what the requirements are before



deciding.

- I would like to take the exam, but feel I'd need more experience and preparation before I could pass the exam.
- I'll maybe take it later but first I'll wait and see what people says about it.
- I'm disabled. I wouldn't be able to justify the expense.
- I'm not a big fan of certifications in general because I feel it just measures a person's ability to take a test. I've been doing system administration for almost 20 years, much of it in BSD UNIX going back to SunOS 4.x. I have done my share of interviewing as the interviewer and the interviewee and I would MUCH rather look at a person's experience than at any certifications. I would also much rather be looked at for my experience. If the person has experience then the certification doesn't mean much. If the person has little to no experience then the certification.... well doesn't mean much.
- I'm not ready quite yet. When I am, yes.
- I'm not sure yet, actually.
- I'm self-employed and my FreeBSD business is exploding. To date, no customer has demanded that I have any formal training or certifications, which is good because I have none. :)
- I'm sure I can't afford it, my country has a very bad exchange rate. I also don't think my employer would pay for a non-related exam to my work.
- I've been a BSD user for over 10 years, at times holding a commit bit for OpenBSD and FreeBSD. I don't think that BSD certification is valuable.
- It's a hobby, not a job.
- It's more of a maybe than a no.
- Learning and using BSD as an hobby. It's not a source of income till now.
- Most probably it won't be available where I am currently living. Other then that I would take it right away.
- My company wouldn't see it as a benefit for me ;(
- My experience with vendor/group certified workers has generally been poor. Not always, of course, but most of the time. It seems that many will acquire a certification in order to put something on their resume which does not reflect any ability to actually bring skills and knowledge to bear on a problem.
- None of my potential employers recognize this cert.
- Not a heavy BSD user.
- Not interested. No need (yet). Don't feel 'certifications' are useful in general in



the computer world. And this is out of place, but you don't have an 'extra comments' section: never use a phrase like "What do you perceive as the advantages" in a survey! It completely biases the question.

- Philosophical opinion that certifications don't actually indicate much more than an ability to memorize things; rather than indicate experience and ability.
- Since there is no comment section of this survey... I didn't answer 12/13/14 because I think the important factors in the exam are that: It accurately measures skill using/administering BSD It furthers the causes of the BSD projects It provides a monetary benefit to both the bsdcertification project as well as the individual BSD projects.
- Taking the exam simply doesn't buy me anything. I already work with BSD, doing porting and kernel development, and that, in my opinion, is much more impressive on my CV than an exam result. I would probably take it if it was free, or if someone else was paying for it, just for fun, but I'm not currently in a position to get someone else to pay for it. I would also take the exam if I were compelled to do so, for example if it suddenly became impossible to get a BSD-related job without the qualification. But I don't see that happening in the first few years of the exam being available. Any certification program needs time to prove itself before employers start to rely on it. The rest of the questions will be answered as if someone had offered to pay for it.
- This is the only field available for comments, so here goes: For a survey like this, an outline of the test contents are needed, i.e., associate / professional, number of tests et al.. This especially applies to pricing. \$200 for a single test? Well, it'll have to be a lengthy one to cover anything useful. At least 6 tests are needed for a professional level, at roughly dkk 1200, or \$150-200, a piece. In order to be useful in professional IT business, a BSD exam has to be comparable to Redhat and Cisco CCSP. Associate or entry level exams aren't worth a lot. YMMV, of course... Oh, it'd be nice being able to click both "I'll pay" and "Employer will pay", as we can't alway be sure to get what we want, so we may choose to pay it ourselves :)
- Unless it's free / without fee.
- While I believe a certification would positively improve my working knowledge of BSD, unfortunately I don't feel the certification would be especially marketable for me. My current employer would not pay for the test. I have never had an employment inquiry as a result of the Linux certification I hold. However I use skills it measures on a daily basis more often than those measured by any of my other certifications. Management & HR only seem to notice very well known certifications.
- I am just not good with it.
- It's not a widely known and therefore demanded certificate and job offers with required BSD knowledge are rare. Therefore a BSD certificate would be a private investment.



- I don't see any interest.
- Certification not recognized for now.
- I would like to enhance my professional curriculum with those certifications which with no doubts are very important.
- There is no demand for a certified FreeBSD professional... there is for AIX, for HP-UX, for SUN but not for Free (BSD).
- What for? A few enterprises run FreeBSD, and the ones which do run, do not care about specialized people a certification like this would do "nothing" for me who ever contracts me to work with FreeBSD do it only because they know I am a good professional.
- I would like to know about the level of examination requirements to check out if I what I know is enough to take the exam.
- I'll have a chance to review my knowledge.
- Because I would like to.
- Because it's a colossal parody, how it's possible to certify somebody's mind processing. What someone will achieve in his way, may be achieved by someone in other way (there are many ways to achieve the same effect), that's why I say it's a parody.
- Certification rises to commercialization and cause differences in communities. I'm against commercialization.
- To check myself in exam? for what? I'm aware of my knowledge and I don't need certificate. I'm only interested in FreeBSD certification.
- I'm a user, administrator, fan of FreeBSD for 10 years. I want to underscore my qualifications and review my knowledge.
- Maybe someday. For now, I don't feel like I need it.
- I'm sure that it will cost too much, and I'm not so good in BSD (but if exams will not be too expensive, let's say 30-35\$ US. I'll try).
- I'm not a specialist in BSD.
- I'm not sure how certificate could affect my career. It'll take time for employers to know the value of this certificate.
- Because I would like to have a certificate confirming my knowledge of BSD systems.
- Because I'm a student of IT, and I use FreeBSD over a year.
- Because I would like to have a certificate confirming my knowledge of BSD systems.



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- Certificate could be helpful while looking for a job.
- As a test of my knowledge in administration of FreeBSD.
- I'll go for it, if it will be not far from me and at an acceptable price.
- I'll not go for it.
- People who make certifications do not care about the certification itself being serious.
- People who make certifications only care about the money they make and not about people getting certified.
- Because BSD is a standard, no particular group should claim the rights for the test distribution or the final decision about who can or can not be certified, that group should not be allowed to exist.
- Certifications in general are for making money and not for the knowledge of the people being certified.
- Currently none of my potential employers will require or welcome it.
- Certifications don't bring anything to an employee with existing job security. Employer would not reimburse the cost. Employer expects mastery of the subject regardless of whether you have a certificate.
- Will wait until the first reports of experiences with the test are available.
- Will wait for general acceptance and general framework conditions.
- There are other tests that are more important to me at the moment, that I need to complete first.
- Working with BSD systems (VAX, i386, Alpha) for more than 15 years, and have never been asked for a certification, nor seen an advantage to having one. (Remaining questions answered "as if" ...)
- Due to studying for a degree in Computer Science, I have no time to do this now. After graduation, or at a later time, I would do it.
- For financial reasons, and I see no advantage with regard to my eventual employment.
- For what reason? what usefulness?
- Use FreeBSD primarily in my free time. Have introduced it in the workplace in recent years (Routing, NAT, VPN, Firewall, Network-backup). The company is most likely not interested in certifying a mere three employees, since our priorities are elsewhere (web applications).
- Need more time, since I only know OpenBSD so far, and the test requires knowledge of all BSDs.



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- Career, additionally studies, no time.
- Don't have much to do with BSD at work. Maybe I do the exam in a few years.
- So far my knowledge with regard to BSD has been sufficient for me to successfully complete my assignments.
- So far I haven't had to prove my knowledge, rather the employer must trust me or give me his own test.
- Haven't needed to use BSD so far, but am interested. If my company had any interest, I would also gladly do it. Besides, right now I'm studying after work. But when that's all done, I'll have time again. For each test I drive 300 km one way, each semester costs > 300 Euro.
- Since I currently have no need of it, and would only take it at an opportune time.
- Because I want to deepen my understanding of BSD systems first, as soon as I've done that, I'll work on testing.
- Because it wouldn't gain me any advantage professionally.
- Because the test doesn't take priority, but I'd do it eventually, when study materials are freely available and there's a local testing opportunity. The market relevance of BSD is too small for me. See http://www.gulp.de/kb/tools/trend.htm. Compare Solaris, Linux and BSD. Generally, I also doubt the qualifications of multiple-choice certified "Experts". Since I'm a BSD fan, I welcome everything that raises it's recognition quotient.
- At this time not using BSD, time planning, planning for a trip.
- Wait to see how well the test is accepted.
- Wait to see how the test is implemented.
- Wait for a demand for certified persons.
- Wait to see how necessary it will be.
- There is an interest, but neither the costs nor the subjects covered are precisely known.
- Not enough relevance. The certification is, in and of itself, not strong enough and, in my opinion, not demanded in the marketplace.
- There was no selection for "eventually".
- There are too few BSD servers. Only Solaris and OSX are interesting commercially. The next questions are only valid if there's a demand.
- It depends on where I can obtain the certification. Besides, there's still the question of cost (travel/actual test/possible overnight) which can't come to very much for a student.



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- First it has to prove itself necessary, it has to make sense. I already have enough certifications that cost a lot of money, but which nobody is really interested in.
- It must first establish itself.
- It depends on how the test is implemented.
- Exams only show a snapshot of knowledge, and, in practice, don't tell you anything about the capability of the tested.
- Don't have any BSD skills, might be willing to learn, but the costs of the exam would probably be too high for me.
- Has no worth.
- Don't know what advantage it would bring me.
- Don't need it for my career anymore.
- I don't need it, and I don't believe that it would improve my BSD skills.
- I don't think I would pass the test without schooling, for which I don't have the money. If I got it paid for, I would answer the first question with 'yes'.
- I'm coming from the viewpoint that it only makes sense to take the test, if the certification already has a certain level of recognition, and isn't just another unimportant piece of paper.
- I just recently started with BSD, and don't know enough about it to pass a test. I will definitely want to take the test at a later time.
- I have no BSD skills, but when I have them and consider them good enough, I will definitely get the certification.
- I don't see it as necessary at this time. I am, however, open to it and will observe the possibilities.
- I don't think all that much of certifications.
- I don't think much of certifications. They don't say much about actual, specific capabilities and knowledge. Certificates are, in my opinion, mostly used to mask the lack of deep understanding. Please take this critique as motivation to avoid making a "rote-memorization" type of test.
- I don't think it would bring me an advantage at this time.
- I'd like to make the decision once it's available.
- I still need to gain sure footing in BSD.
- I want to wait for the acceptance of the certification.
- I would first like to educate myself regarding the quality of the certification. I also find the broad coverage interesting.



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- I'd first like availability locally. I'm only looking at this out of curiosity, and have not yet certified in areas that are of more interest to me (Linux, Java).
- I see no practical usefulness therein.
- I'm not sure exactly what's being asked here.
- I know what BSD is, but that's about it.
- I'll wait and see if the time and money investment is worth it.
- I'll see it and judge it for myself, and then decide for or against.
- I'll probably wait until I'm done with school, since that takes precedence.
- I'd like to see how the exams develop and if it's worth participating.
- I'd wait about 3 months, until the early bugs are removed.
- I'd probably want to save myself the time and money.
- Other priorities at the moment.
- At the moment no occupational or personal need.
- It's a question of price.
- Depending on time and how the certification evolves.
- Can't say yet when there will be time and money left over for it.
- No money.
- No actual need.
- No market demand.
- No demand in the market for BSD certifications.
- No usage.
- No certification seems to offer me an advantage in the job search, neither do I look whether candidates have a certification ... mostly humbug.
- Nobody needs a certification about BSD knowledge. Aren't there already enough nonsense certificates like MCSE and Co.?
- Depends on the comprehensiveness of the test and the price, as well as the availability of testing centers. It must also be possible to obtain the certification in Self-Study format, without requiring expensive seminars, since employers are less and less willing to pay for them, and it is left to the employee to certify his skills.
- Depends on the requirements: e.g. price, location, time ...



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- Depends on whether my employer wants it and pays for it, and/or what it would cost.
- Wait for conditions, expand understanding.
- Probably costs money, and as a private citizen I basically don't buy such things. Should it be free [as in money], I would do it.
- Unfortunately don't have basic skills in the BSD world.
- My curriculum determines when I can do which certifications.
- My bewitching female colleagues love me anyway.
- In my opinion the most important is if there are one or more books for reference to the exam materials? Like for example Cisco or Solaris.
- Would need to prepare first ... that takes time, so not 'as soon as it's available', capice?
- Possibly too expensive.
- No, I'd wait to see if I actually needed it first.
- Insufficient knowledge, cost factor.
- No need for it yet as I work for myself.
- Not enough knowledge yet.
- Insufficient experience with *BSD.
- Only if you pay me a large commission.
- Open Source is crap, no usable roadmaps, no usable driver support, no useble tech support.
- Need to use it personally first.
- Don't see the necessity at this time.
- Need to dig into BSD more deeply before taking the test.
- Uncertainty about how much it costs and where to take the test. Besides, I'll wait for the first opinions/results.
- To clearly demonstrate our BSD competence to the client.
- Maybe if it were affordable and generally recognized, I have experience with diverse Unixes (Linux, Solaris, IRIX, Tru64 ...)
- Probably not right away, but I would think about it in any case.
- Why should I? The certification mania gets on my nerves anyway, and I don't see what it would bring -- see "MCSE" etc. The effect would just be that some people



(the certifiers) cash in, and other people get marginalized (those who, for whatever reason, don't pass), while the client/employer can just count the pieces of paper (and measuring - that's a self-strengthening process). Furthermore, through that process, the multiplicity of "standards" that the certification tests against is lessened. In the end the BSD-ers will do Sendmail and the Linuxers Postfix, without any valid reason.

- Because I always prove first whether the certification is relevant to my work.
- Because this certification is unimportant. Employers expect a degreed Computer Scientist to already have these skills, or can quickly learn them.
- Because, as a student, it's currently of no use to me. Because as a student I have little financial means at my disposal anyway.
- Because I don't yet know the conditions.
- Because I don't absolutely need it, professionally.
- Because I'm not currently working with BSD. Therefore it doesn't interest me at the moment.
- Because I don't use any BSD.
- Because I want to have a look at it first, insofar as how it would overlap the certifications I already have.
- Because I don't yet have enough knowledge.
- Because I've seen too many people with certifications who don't have a clue about the subject matter.
- Because I seriously doubt the efficacy of such a certification. My experience tells me that many pass these tests and still don't have a clue. Memorizing just isn't experience. Only someone with years of experience with UNIX can credibly say that he's knowledgeable. A certification proves nothing. It would be better for the employers to have a test in hand with which they can prove the intestinal fortitude of the candidate. That would supply the kind of pressure necessary to separate the wheat from the chaff. In practice, these tests are administered by computer. The candidates come in and answer the questions faster than they can even read them. This is caused by the tests becoming widely available on the open market, and the candidates simply memorize them. Then they go in and click the appropriate boxes. I've seen reports of Russians with no knowledge of German or English, successfully completing such tests faster than native speakers that actually read and answer the questions.
- Because I'll probably move my professional future out of the country.
- Because I will do other certifications first, e.g. LPI and I have other things to do.
- Because it isn't being asked for at the moment.



- Because such exams are worthless. They're current for at most 1 year, and then overhauled.
- Don't know yet.
- Nobody in our professional vicinity is using BSD.
- I don't know.
- Little time, am currently a software developer, so it's not necessary yet.
- Once this exam is established in the IT world, and has professional worth and usefulness for me, I would eventually take such an exam.
- When I know that I've mastered something, I don't need to have it proven to me by an exam, particularly since my previous employers had stipulated that said mastery was not in question.
- Who needs it?
- Wouldn't make any sense for me.
- Would first want to be familiar with the contents of the exam, and would want to see the reactions of other examinees.
- Not enough knowledge at this time.
- Time reasons.
- Time problem.
- Too little experience.



2.3 Question 3: In which country would you take the exam?

The third question asked responders to indicate the country where they would prefer to take the exam. A text box was provided for the responder to type in the country and several responders indicated multiple countries. In all, 58 countries were indicated. Table 2-3 lists the countries and the number of responders from each translated language for each country.

When reading the chart, one should note that Benelux is an economic union comprised of three countries: Belgium, the Netherlands, and Luxembourg; one responder used the term Benelux while other responders specified a country within that union. Similarly, the United Kingdom is comprised of England, Scotland, Wales and Ireland; some responders chose to specify one of these four countries while other responders chose United Kingdom. In all such cases, the chart indicates the responses as seen on the survey.

Answers key for Table 2-3:

- A Brazilian Portuguese
- B English
- C French
- D German
- E Italian
- F Mexican Spanish
- G Polish

Country	Α	В	С	D	Ε	F	G	Total
Albania		1						1
Argentina		3				6		9
Australia		10						10
Austria		2		27				29
Belarus		1						1
Belgium		1	3	1				5
Benelux				1				1

Table 2-3: In Which Country?



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Country	Α	В	С	D	Ε	F	G	Total
Bosnia and Herzegovina		1						1
Brazil	80	3						83
Bulgaria		1						1
Canada		26	6					32
Chile		1				1		2
Columbia						1		1
Croatia		2						2
Czech Republic		1						1
Denmark		8						8
Dominican Republic						1		1
Egypt		2						2
England		5	1					6
Estonia		1						1
France		4	35					39
Germany		9	1	580				590
Greece		3						3
Hungary		2						2
India		9						9
Indonesia		1						1
Ireland		1					1	2
Italy		4		1	7			12
Japan		1						1
Kenya		1						1
Latvia		1						1
Luxembourg				1				1
Malaysia		15	1					16
Mexico		3				11		14
Morocco			1					1
Netherlands		15		3				18
Norway		3						3



Country	Α	В	С	D	E	F	G	Total
Paraguay		1				1		2
Poland		7		1			160	168
Portugal		2						2
Qatar		1						1
Romania		2						2
Russia		6						6
Saudi Arabia		1						1
Serbia		2						2
Singapore		1						1
Slovakia		1						1
South Africa		2		1				3
Spain		4	1	3		9		17
Sweden		8					1	9
Switzerland		4	2	34				40
Taiwan		1						1
Ukraine		2						2
United Kingdom		12		2			1	15
United States		155		1		1	1	158
Uruguay						2		2
Uzbekistan				1				1
Venezuela		1				2		3

There were also some responses that did not match a specific country:

- One responder indicated free through some website
- Another indicated anywhere within Europe
- One responder wished for the exam to be available online



2.4 Question 4: In which city would you prefer to take the exam?

For this question, responders were given a text box to type in their preferred city; again, several responders indicated several cities which would be convenient for them to take the exam.

The answers to this question will be very useful in determining which cities require a proctored testing area. The cities have been organized by country. Canada has been further organized by province and the United States by state. Singapore and Washington D.C are considered to be city-states and therefore don't show a sub-entry. One responder mentioned Luxembourg; it may be safe to assume that that response refers to both the country and its largest city.

<u>Albania</u>

Tirana

<u>Argentina</u>

Buenos Aires

<u>Australia</u>

Canberra Hobart Launceston Melbourne Sydney

<u>Austria</u>

Graz Innsbruck Salzburg Vienna



<u>Belarus</u>

Minsk

<u>Belgium</u>

Antwerp Brussels Liège

Bosnia & Herzegovina

Banjaluka

<u>Brazil</u>

Aracaju

Bauru

Belo Horizonte

Brasilia

Campinas

Caxias do Sul

Chapecó

Curitiba

Florianopolis

Fortaleza

Goiânia

Itajai

Joao Pessoa

Joinville

Juiz de for a

Lençóis Paulista

Londrina

Maringá

Porto Alegre



Porto Velho Recife Ribeirão Preto Rio de Janeiro Salvador Sao Paulo Uberlândia

<u>Bulgaria</u>

Sofia

<u>Canada</u>

<u>Alberta</u>

Calgary Edmonton

British Columbia

Kamloops Kelowna Vancouver Victoria

<u>Manitoba</u>

Winnipeg

<u>Ontario</u>

Kanata

Ottawa

Toronto

<u>Quebec</u>

Montreal



Rimouski

<u>Saskatchewan</u>

Regina

<u>Chile</u>

Concepcion Santiago

Valparaiso

Vina del Mar

<u>Columbia</u>

Medellin

<u>Croatia</u>

Zagreb

Czech Republic

Prague

<u>Denmark</u>

Copenhagen Kolding Vejle

Dominican Republic

Santo Domingo

<u>Egypt</u>

Cairo Mansoura



<u>England</u>

Bangor

Blackpool

Brighton

Bristol

Cambridge

Chester

Liverpool

London

Manchester

Newcastle

Peterborough

Preston

<u>Estonia</u>

Tallinn

France

Annecy

Bordeaux

Dijon

La Rochelle

Le Mans

Lyon

Metz

Nantes

Paris

Poitiers

Rennes

Strasbourg

Toulouse



<u>Germany</u>

Aachen Altötting

Augsburg

Bad Oeynhausen

Bamberg

Bayreuth

Berlin

Bielefeld

Bochum

Bonn

Braunschweig

Bremen

Chemnitz

Coburg

Cologne

Darmstadt

Detmold

Dortmund

Dresden

Duisburg

Düsseldorf

Erfurt

Essen

Flensburg

Frankenthal

Frankfurt

Freiburg

Fulda

Fürth



Furtwangen Gelsenkirchen

Giessen

Gifhorn Göttingen

Greifswald

Hagen

Halle an der Saale

Hamburg

Hanover

Heidelberg

Heilbronn

Hof

Ingolstadt

Iserlohn

Kaiserslautern

Karlsruhe

Kassel

Kempten

Kiel

Koblenz

Landau

Leipzig

Linz

Lübeck

Lüneburg

Magdeburg

Mainz

Mannheim

Marburg

Merseburg



Munich Münster

Neumünster

Nuremburg

Oldenburg

Osnabrück

Paderborn

Passau

Peine

Potsdam

Ravensburg

Regensburg

Remscheid

Rosenheim

Rostock

Saarbrücken

Schwerin

Siegen

Stuttgart

Trier

Tübingen

Ulm

Villingen-Schwenningen

Weiden

Wolfsburg

Wuppertal

Würzburg

Zittau

<u>Greece</u>

Athens



Larissa

Hungary

Budapest

<u>India</u>

Bangalore Kochi New Delhi Pune

<u>Indonesia</u>

Jakarta

<u>Ireland</u>

Dublin Galway

<u>Italy</u>

Bologna Milan Modena Rome

<u>Japan</u>

Tokyo

<u>Kenya</u>

Nairobi



<u>Latvia</u>

Riga

Luxembourg

<u>Malaysia</u>

Kuala Lumpur Petaling Jaya Selangor

Mexico

Cancun

Distrito Federal

- Guadalajara
- Mazatlán

Merida

Mexico City

Puebla

Querétaro

Sinaloa

Torreon

Veracruz

<u>Mongolia</u>

Ulan Bator

<u>Morocco</u>

Casablanca Rabat



<u>Netherlands</u>

Amsterdam

Delft

Eindhoven

Groningen

Hague

Leiden

Rotterdam

Utrecht

<u>Norway</u>

Bergen Oslo

Paraguay

Asuncion

<u>Poland</u>

Białystok

Bydgoszcz

Częstochowa

Gdansk

Gliwice

Gorzów

Jelenia Góra

Kalisz

Katowice

Kielce

Koszalin

Krakow

Łódź



Lublin Opole

Piła

Płock

Poznañ

Rzeszów

Sosnowiec

Walbrzych

Warsaw

Wroclaw

Zielona Góra

<u>Portugal</u>

Faria

Lisbon

Porto

<u>Qatar</u>

Doha

<u>Romania</u>

Bucharest

<u>Russia</u>

Moscow

<u>Saudi Arabia</u>

Jeddah

<u>Serbia</u>

Belgrade



<u>Singapore</u>

<u>Slovakia</u>

Bratislava

South Africa

Cape Town

<u>Spain</u>

Barcelona

Bilbao

Cordoba

Madrid

Málaga

Santa Cruz de Tenerife

Seville

<u>Sweden</u>

Gothenburg Helsingborg Stockholm

Sundsvall

Uppsala

Switzerland

Basel

Berne

Geneva

Lucerne

Zurich



<u>Taiwan</u>

Taipei

<u>Ukraine</u>

Kiev Nikolaev Odessa

<u>Uruguay</u>

Montevideo

<u>USA</u>

<u>Alabama</u>

Birmingham Huntsville Mobile

<u>Alaska</u>

Anchorage

<u>Arizona</u>

Phoenix

<u>California</u>

Berkeley Fresno Irvine Long Beach Los Angeles Monterrey



San Diego San Francisco San Jose

<u>Colorado</u>

Denver

Connecticut

Danbury Stamford

<u>Florida</u>

Daytona Beach Deltona Jacksonville Melbourne Orlando Sarasota Tampa

<u>Georgia</u>

Atlanta

<u>Illinois</u>

Bloomington Champaign Chicago Rockford Urbana



<u>Indiana</u>

Indianapolis Lafayette

<u>Iowa</u>

Cedar Rapids Des Moines

Kentucky

Louisville

<u>Louisiana</u>

Shrevport

Maryland

Annapolis Baltimore Columbia Hagerstown

Massachusetts

Boston

<u>Michigan</u>

Ann Arbor Detroit Flint Grand Rapids Kalamazoo Lansing



<u>Minnesota</u>

Duluth Minneapolis St. Paul

<u>Mississippi</u>

Jackson

<u>Nebraska</u>

Lincoln Omaha

<u>New Hampshire</u>

Manchester Portsmouth

<u>New Jersey</u>

Hawthorne Parsippany Paterson Whitehouse Station

New Mexico

Albuquerque

<u>New York</u>

New York City Syracuse Watertown



<u>North Carolina</u>

Durham Greensboro Greenville Raleigh

<u>Ohio</u>

Columbus Dayton

<u>Oklahoma</u>

Tulsa

<u>Oregon</u>

Eugene Portland

<u>Pennsylvania</u>

Harrisburg Philadelphia Pittsburgh

South Carolina

Charleston

South Dakota

Sioux Falls

Tennessee

Nashville



<u>Texas</u>

Austin Dallas Houston San Antonio

<u>Utah</u>

Salt Lake City

<u>Virginia</u>

Reston Tysons Corner Winchester

Washington

Bellevue Seattle

Washington D.C.

<u>West Virginia</u>

Martinsburg

<u>Wisconsin</u>

Appleton Milwaukee

<u>Venezuela</u>

Maracay



<u>Wales</u>

Cardiff

Some US cities were ambiguous as the state was not mentioned:

- Rapid City could be in Michigan or South Dakota
- SAC may be referring to Sacremento, CA
- Sun City could be in Arizona, California, Florida, Illinois, Nevada, South Carolina, or Texas
- Williamsburg could be in Colorado, Florida, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, New Mexico, North Carolina, Ohio, Pennsylvania, or Virginia
- St. Louis could be in Michigan, Missouri, or Oklahoma

Several responders did not indicate a specific city:

- Any city of India
- Online
- Free through some website
- Prefer online
- In the South of Germany
- In the large cities of Germany
- Somewhere in the Free State of Thuringia (Germany)
- Anywhere in Venezuela



2.5 Question 5: How far are you willing to travel to take the exam?

Travelling to take the exam does not appear to be a problem for testing candidates with most indicating they would travel either up to 50 or 100 km. Over 25% of the responders were willing to travel over 100 km to take an exam.

Figure 2.2 shows the merged results from all of the translated surveys:

5. How far are you willing to travel to take the	exam?	
Under 10 km	— 8.5%	(118)
Up to 50 km	 32.2%	(447)
Up to 100 km	29.7%	(412)
Over 100 km	25.7%	(356)
TOTAL	96.1%	1387
Fia	uro 7 7	

Figure 2.2

Table 2-4 charts the results for each translated version of the survey. The answers to this question reveals some regional differences regarding willingness to travel.

Answers key for Table 2-4:

- A Under 10 km
- B Up to 50 km
- C Up to 100 km
- D Over 100 km



Language	Α	В	C	D
Brazilian Portuguese	6	15	19	39
English	52	129	85	86
French	6	17	11	11
German	37	239	235	139
Italian	1	5	1	1
Mexican Spanish	2	8	10	15
Polish	14	34	51	65
Total:	118	447	412	356
Total as a percentage:	8.85%	33.53%	30.90%	26.70%

 Table 2-4: How far are you willing to travel?

2.6 Question 6: In what language would you prefer to take the exam?

While the survey itself was available in 7 languages, responders indicated a preference for 22 different languages when typing in their response to this question. Currently, the BSD Certification Group has translation teams in place for 15 of the specified languages with no teams currently available for:

- Arabic
- Estonian
- Japanese
- Malay
- Persian
- Swahili
- Swedish

With the exception of Swedish, each of those missing languages was requested by one responder.

Table 2-5 charts the number of responders for each requested language by translated version of the survey.



Answers key for Table 2-5:

- A Brazilian Portuguese
- B English
- C French
- D German
- E Italian
- F Mexican Spanish
- G Polish

Language	Α	В	С	D	Ε	F	G	Total
Arabic		1						1
Bahasa		1						1
Danish		2						2
Dutch		4						4
English	27	335	14	347	3	12	68	806
Estonian		1						1
French		2	36					38
German		4	1	532				537
Hungarian		1						1
Italian				1	7			8
Japanese				1				1
Malay		1						1
Persian				1				1
Polish		7					134	141
Portuguese (pt-br)	61							61
Romanian		1						1
Russian		5		3				8
Serbo-Croatian		1						1
Spanish		7	1	3		27		38

Table 2-5: In Which Language?



Language	Α	В	С	D	E	F	G	Total
Swahili				1				1
Swedish		5						5
Traditional Chinese		1		1				2

Several responders left comments fine-tuning their preference for "English" or why they chose English from a translated version of the survey:

- American English
- Canadian English
- Non-US mangled English if possible!
- Not the US variant of English
- English as translating technical terms is bad
- English because everything in IT is English
- Preferably English, too many bad German translations seen

Table 2-6 further breaks down the percentage of English as the preferred language for each translated version of the survey. Calculations divide the number of responders who chose English by the total number of responders for that language.

Language	English	Non-English
Brazilian Portuguese	32.92%	67.08%
English	92.54%	7.46%
French	30.43%	69.57%
German	50.87%	49.13%
Italian	33.33%	66.67%
Mexican Spanish	32.43%	67.57%
Polish	40.23%	59.77%

Table 2-6: Percentage of English as the Preferred Language



2.7 Question 7: Would you consider taking the exam at a conference?

With the exception of Italy (who is hosting EuroBSDCon 2006) and Poland, the other survey translations were split nearly 50/50 regarding this question.

Figure 2.3 shows the merged results from all of the translated surveys:

7. Would you consider taking the exam at a conf	erence?	
Yes	 50.3%	(697)
No	46.1%	(640)
TOTAL	96.4%	1387
Figur	re 2.3	

Table 2-7 charts the responses by translated survey:

Language	Yes	No
Brazilian Portuguese	39	40
English	193	162
French	21	23
German	361	291
Italian	7	1
Mexican Spanish	19	16
Polish	57	107
Total:	697	640
Total as a percentage:	52.13%	47.86%

Table 2-7: Would you take the exam at a conference?



2.8 Question 8: If yes, which conference(s)?

In this question, responders were given a list of conferences and were allowed to choose as many as they were interested in.

Figure 2.4 shows the merged results from all of the translated surveys:

8. If yes, which conference(s)? (cho	ose all that apply)	
EuroBSDCon	20.0%	(277)
BSDCan	—— 12.3%	(171)
Usenix	— 9.9%	(137)
OSCON	— 4.7%	(65)
NYCBSDCon	— 5.6%	(78)
Linuxtag	 26.5%	(368)
Other	—— 16.7%	(231)
	Figure 2.4	

Table 2-8 shows the number of responses for each translated version. Hyperlinks are included to the website for each conference.

Answers key for Table 2-8:

- A Brazilian Portuguese
- B English
- C French
- D German
- E Italian
- F Mexican Spanish
- G Polish



Conference	Α	В	С	D	Ε	F	G	Total
EuroBSDCon	11	63	16	153	7	7	20	277
BSDCan	15	72	6	55	4	6	13	171
<u>Usenix</u>	9	59	2	55	3	4	5	137
OSCON	5	30	1	23	0	2	4	65
NYCBSDCon	6	49	1	15	0	3	4	78
LinuxTag	5	31	5	316	1	3	7	368
Other	22	71	7	82	1	10	38	231

Table 2-8: At Which Conferences?

2.9 Question 9: Other conference:

Responders were provided a text box to input their desired conferences. Results for each translated survey are charted in Table 2-9. When available, hyperlinks to the conference website are included. Some conferences appear to have been one-time events, have not occurred within the past year, or do not maintain a year round website presence. In addition, some conference acronyms were unclear as to which conference they referred to.

Answers key for Table 2-9:

- A Brazilian Portuguese
- B English
- C French
- D German
- E Italian
- F Mexican Spanish
- G Polish

Conference	Α	В	С	D	Ε	F	G	Total
APRICOT		1						1
AUUG		2						2

Table 2-9: Which Other Conferences?



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Conference	Α	В	С	D	Ε	F	G	Total
BCN						1		1
Berlinux				1				1
<u>BlackHat</u>		2						2
BSDCon	3							3
BSDDay	4					1		5
CaFeCONF						1		1
CanSecWest		1						1
CCC		4		16				20
CeBIT			1	14				15
Cisco Networkers		1						1
CLUC-DORS		2						2
<u>CONFidence</u>		1					4	5
CONISLI	1							1
CONSOL						1		1
DOAG				1				1
EMSL	1							1
exponet				1				1
Ficit						1		1
FISL	3							3
FOSDEM		4	1	2				7
FOSS.IN		1						1
FreeCON							2	2
FrOSCon				3				3
GUUG				2				2
Hack in the Box		1						1
IT Underground		1						1
Jornadas BSD España						1		1
JSL						1		1
linux.conf.au		1						1
LinuxAcademy		1						1



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Conference	Α	В	С	D	Ε	F	G	Total
LinuxAsia		1						1
Linuxfest Northwest		3						3
<u>LinuxForum</u>		3						3
LinuxInfo Tag				2				2
LinuxSymposium		1						1
Linuxwochen		1		1				2
LinuxWorld		6		1				7
LISA		1						1
LUG-Camp				1				1
<u>MacExpo</u>				1				1
meetBSD		3					23	26
NANOG		2						2
OpenCON	1	2			1			4
OSDC		1						1
OSSFrickelTag				1				1
PHPConference							1	1
<u>pkgsrcCon</u>				1				1
RMLL		1	1					2
SANE		1						1
SANS		2						2
SCALE		1						1
SecureCON							2	2
Singapore Linux		1						1
Solutions Linux			1					1
SUCON		1						1
Systems				3				3
toorCON		1						1



Those who organize conferences may find the requested conference locations of interest:

- A conference close to Dallas, TX
- Any conference
- Two responders mentioned any BSD conference in India
- Any BSD conference
- Any conference in the Chicago, Milwaukee, Detroit area
- Any conference near Hagerstown, MD, Martinsburg, WV, or Winchester, VA
- Any European conference
- Any conference in France
- Any local conference
- Any Polish *BSD conference
- Any Open Source conference in Malaysia
- Exam should be free and be taken on Internet website
- Local conferences in Saudi Arabia and it can be arranged with the local LUGs
- Local Open Source or BSD conferences
- Newly invented one for Jacksonville, FL
- One in Perth
- One that took place near Birmingham, AL
- Something relatively local
- Somewhere more local
- Whatever conference is close to home
- Whatever conference I happen to be at. I've attended none of the above, and really am not sure what I'd be most likely to attend
- Any FreeBSD Brazilian conference
- The Brazil BSD users conference, I forget the name of the event
- Any conference in Brazil
- Any Internet conference
- Any Polish conference
- Any conference in Mexico



2.10 Question 10: What is the maximum price you would be willing to pay to take the exam?

Responders from all translated surveys, except Polish which indicated a lower price point, indicated that \$100 USD is the maximum price the majority of testing candidates are willing to pay to take an exam.

If this is the price the market is willing to bear it is unlikely that the BSD Certification Group can afford to use the existing commercial solutions and still generate enough revenue to cover the costs associated with delivering the exam.

Figure 2.5 shows the merged results from all of the translated surveys:

10. What is the maximum price you would be willing to pay to take the exam? (prices are in US dollars)				
up to \$50	 27.8%	(386)		
up to \$100	 38.7%	(537)		
up to \$150	—— 15.8%	(219)		
up to \$200	—— 13.4%	(186)		
TOTAL	95.7%	1387		
Figure 2.5				

Table 2-10 charts the responses for each translated version of the survey.

Answers key for Table 2-10 where prices are in US dollars:

- A Up to \$50
- B Up to \$100
- C Up to \$150
- D Up to \$200



Language	Α	B	С	D
Brazilian Portuguese	17	37	16	9
English	68	140	75	70
French	14	24	3	4
German	194	265	106	81
Italian	2	4	1	1
Mexican Spanish	5	14	6	9
Polish	86	53	12	12
Total:	386	537	219	186
Total as a percentage:	29.06%	40.43%	16.49%	14.00%

Table 2-10: Which Maximum Exam Price?

2.11 Question 11: Who would most likely pay for you to take the exam?

The vast majority of responders intend to pay for the exam themselves. Figure 2.6 shows the merged results from all of the translated surveys:

Yourself	83.0%	(1151)
Your employer	— 11.6%	(161)
Someone Else	— 1.6%	(22)
TOTAL	96.2%	1387
F ²	- 7 6	



Table 2-11 charts the results per survey translation.

Answers key for Table 2-11:

- A Yourself
- B Your Employer
- C Someone Else



Language	Α	В	С
Brazilian Portuguese	72	6	1
English	292	59	3
French	42	2	1
German	571	65	14
Italian	3	5	0
Mexican Spanish	31	3	0
Polish	140	21	3
Total:	1151	161	22
Total as a percentage:	86.28%	12.06%	1.64%

Table 2-11: Who would pay for the exam?

2.12 Question 12: What do you perceive as the advantages of having the exam available at a VUE or Thomson testing center?

The next three questions ask responders to compare the same list of perceived advantages against three different exam delivery methods. Each question has its own chart; additionally, a chart comparing the results of all three questions can be found in Table 2-15 on page 63.

Question 12 was worded as follows:

VUE (http://www.vue.com) and Thomson (http://www.thomson.com) both provide computer based testing at existing testing centers throughout the world. While the actual payment to VUE or Thomson to provide an exam varies with volume, at least \$75 of an exam's price would go to VUE or Prometric. What do you perceive as the advantages of having the exam available at a VUE or Thomson testing center? (choose all that apply)



Figure 2.7 shows the merged results from all of the translated surveys:

12. VUE (http://www.vue.com) and Thomson (http://www.thomson.com) both provide computer based testing						
at existing testing centers throughout the world. While the actual payment to VUE or Thomson to provide an						
exam varies with volume, at least \$75 of an exam's price would go to VUE		· ·				
as the advantages of having the exam available at a VUE or Thomson test	ing center? (choo s e	all that apply)				
It would make the exam available in my geographic area.	52.6%	(730)				
The exam would be inexpensive.	21.1%	(293)				
The exam delivery would be secure.	30.4%	(421)				
It would be easy to register and pay for an exam.	41.2%	(572)				
I would prefer not to take the exam using a VUE or Thomson testing center.	28.7%	(398)				

Figure 2.7

Table 2-12 charts the results for each version of the survey.

Answers key for Table 2-12:

- A It would make the exam available in my geographic area
- B The exam would be inexpensive
- C The exam delivery would be secure
- D It would be easy to register and pay for an exam
- E I would prefer not to take the exam using a VUE or Thomson testing center

Table 2-12: Perceived Advantages for using VUE or Prometric

Language	Α	В	С	D	Ε
Brazilian Portuguese	50	18	20	29	18
English	239	59	98	189	95
French	25	6	9	16	19
German	300	152	246	281	189
Italian	5	3	1	2	3
Mexican Spanish	21	10	12	17	13
Polish	90	45	35	38	61
Total:	730	293	421	572	398
Total as a percentage:	52.63%	21.12%	30.35%	41.24%	28.69%

Since responders could select multiple responses, the total number of responders, 1387, was used in calculating the total as a percentage.



2.13 Question 13: What do you perceive as the advantages of having the exam available using a custom delivery solution created and maintained by the BSDCG?

This question was worded as follows:

An alternative to using VUE or Prometric would be to create a custom test delivery solution. This could shave approximately \$75 off the exam price but would require the BSDCG to find locations willing to use that solution. What do you perceive as the advantages of having the exam available using a custom delivery solution created and maintained by the BSDCG? (choose all that apply)

Figure 2.8 shows the merged results from all of the translated surveys:

13. An alternative to using VUE or Prometric would be to create a custom test delivery solution. This could shave approximately \$75 off the exam price but would require the BSDCG to find locations willing to use that solution. What do you perceive as the advantages of having the exam available using a custom delivery solution created and maintained by the BSDCG? (choose all that apply)

bolation ereated and maintained by the bebeen (encode an that appij)		
It would make the exam available in my geographic area.	31.9%	(443)
The exam would be inexpensive.	54.4%	(755)
The exam delivery would be secure.	26.3%	(365)
It would be easy to register and pay for an exam.	24.6%	(341)
I would prefer not to take the exam using a custom delivery solution.	—— 16.4%	(227)
Figure 2.8		



Table 2-13 charts the results for each version of the survey.

Answers key for Table 2-13:

- Α It would make the exam available in my geographic area
- В The exam would be inexpensive
- С The exam delivery would be secure
- D It would be easy to register and pay for an exam
- E I would prefer not to take the exam using a VUE a custom delivery solution



Language	Α	В	С	D	Ε
Brazilian Portuguese	26	51	26	33	14
English	121	215	83	94	63
French	14	24	11	15	6
German	160	339	190	141	119
Italian	4	5	1	3	0
Mexican Spanish	21	23	16	15	5
Polish	97	98	38	40	20
Total:	443	755	365	341	227
Total as a percentage:	31.93%	54.43%	26.31%	24.58%	16.36%

Table 2-13: Perceived Advantages for using a custom solution

Since responders could select multiple responses, the total number of responders, 1387, was used in calculating the total as a percentage.

2.14 Question 14: What do you perceive as the advantages of having a paper version of the exam?

Paper based exams are used by some certification bodies to reach geographical areas not covered by existing commercial solutions or where the costs for using a commercial solution is prohibitive due to the economics of that region or a small amount of testing candidates. This is also a popular delivery method for use at conferences as it does not require the setup of computers to deliver the exam.

It is interesting to note that this is the least preferred method of the three delivery options presented on the survey.

Figure 2.9 shows the merged results from all of the translated surveys:

14. What do you perceive as the advantages of having a paper version of the exam?(choose all that apply)

It would make the exam available in my geographic area.	——— 19.5%	(270)
The exam would be inexpensive.	 22.1%	(306)
The exam delivery would be secure.	21.3%	(296)
It would be easy to register and pay for an exam.	—— 10.8%	(150)
I would prefer not to take the paper version of the exam.	41.7%	(578)

Table 2.9



Table 2-14 charts the responses according to survey translation.

Answers key for Table 2-14:

- A It would make the exam available in my geographic area
- B The exam would be inexpensive
- C The exam delivery would be secure
- D It would be easy to register and pay for an exam
- E I would prefer not to take the paper version of the exam

С E Language Α В D **Brazilian Portuguese** 15 12 18 9 38 English 88 105 63 50 153 French 9 7 9 18 6 German 90 123 157 67 281 2 2 Italian 2 1 3 7 Mexican Spanish 10 8 12 19 Polish 56 49 35 10 66 Total: 270 306 296 150 **578** Total as a percentage: 19.46% 22.06% 21.34% 10.81% 41.67%

Table 2-14: Perceived Advantages for using paper based exams

Since responders could select multiple responses, the total number of responders, 1387, was used in calculating the total as a percentage.



Table 2-15 compares the "total" and "total as a percentage" rows for each of the three delivery methods.

Answers key for Table 2-15:

- A It would make the exam available in my geographic area
- B The exam would be inexpensive
- C The exam delivery would be secure
- D It would be easy to register and pay for an exam
- E I would prefer not to take the exam using this delivery method

Language	Α	В	С	D	Е
Total for VUE/Prometric	730	293	421	572	398
% for VUE/Prometric	52.63%	21.12%	30.35%	41.24%	28.69%
Total for custom	443	755	365	341	227
% for custom	31.93%	54.43%	26.31%	24.58%	16.36%
Total for paper	270	306	296	150	578
% for paper	19.46%	22.06%	21.34%	10.81%	41.67%

Table 2-15: Comparison of 3 Test Delivery Methods

The responses in red highlight the percentages of those *not* interested in that test delivery method. It is heartening to note that only 16.36% of respondents are not interested in a custom test delivery solution.

The responses in green highlight the largest response for each perceived advantage. It is telling to note that the existing commercial solutions have the greatest response for 3 out of the 4 perceived advantages, but that there is only a 4% difference in the perception of security between existing commercial solutions and a custom solution.

Should a custom solution be used, it will need to address those highlighted areas:

- availability in diverse geographic areas
- secure exam delivery
- easy registration and payment for an exam



2.15 Question 15: What is your gender?

The introduction to the last three questions in the survey was as follows:

The answers to the following questions help to define the exam audience which is important when negotiating with funding sources. These are of a more personal nature and we appreciate your answers.

Each of these questions included the option "I prefer not to say" but the vast majority of respondents chose to answer these questions.

Question 15 asked the responder's gender. The less than 1.5% ratio of females using Open Source cited on surveys from other organizations was consistent across each of the translated versions of this survey. 2

Figure 2.10 shows the merged results from all of the translated surveys:

15. What is your gender?		
Male	93.7%	(1300)
Female	1.5%	(21)
I prefer not to say.	a 1.9%	(26)
TOTAL	97.1%	1387
Figu	ro 7 10	



Table 2-16 charts the same data per translated survey.

Answers key for Table 2-16:

- A Male
- B Female
- C I prefer not to say
- 2 See the 2006 FlossPols Report available from http://www.flosspols.org/deliverables/FLOSSPOLS-D16-Gender_Integrated_Report_of_Findings.pdf



Language	Α	В	С	
Brazilian Portuguese	80	0	0	
English	341	6	7	
French	44	1	0	
German	632	11	19	
Italian	8	0	0	
Mexican Spanish	35	0	0	
Polish	160	3	0	
Total:	1300	21	26	
Total as a percentage:	96.51%	1.55%	1.93%	

Table 2-16: What is your Gender?

The total as a percentage row was calculated using the total number of responders for each translated version of the survey.

2.16 Question 16: What is your age bracket?

Results for the age of the responders was fairly consistent for each translation where over 50% fell within the 21-30 age brackets.

Figure 2.11 shows the merged results from all of the translated surveys:

16. What is your age bracket?		
15-20	— 5.5%	(76)
21-25	26.6%	(369)
26-30	27.5%	(381)
31-35	—— 16.2%	(225)
36-40	— 9.4%	(131)
Over 40	— 10.7%	(149)
I prefer not to say.	- 1.7%	(23)
TOTAL	97.6%	1387
E ²		

Figure 2.11



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Table 2-17 charts the results across the translated versions of the survey.

Answers key for Table 2-17:

- Α 15-20
- В 21-25
- С 26-30
- 31-35 D
- 36-40 Е
- F Over 40
- I prefer not to say G

Language	Α	В	С	D	Ε	F	G
Brazilian Portuguese	6	34	28	6	1	5	0
English	17	79	116	58	35	48	5
French	2	15	15	4	4	5	0
German	36	152	159	132	80	86	18
Italian	0	1	2	2	2	1	0
Mexican Spanish	0	10	12	5	6	2	0
Polish	15	78	49	18	3	2	0
Total:	76	369	381	225	131	149	23
Total as a percentage:	5.61%	27.25%	28.13%	16.61%	9.67%	11.00%	1.69%

Table 2-17: What is your age bracket?



2.17 Question 17: What is your current working status?

In the final question of the survey, responders were able to choose as many items that most closely matched their current working status. The overwhelming majority of responders in each translated version of the survey is currently working full-time within the IT field.

Figure 2.12 shows the merged results from all of the translated surveys:

17. What is your current working status? (choose all that	apply)	
I am a high school student.		a 3.4%	(47)
I am a student at a college or university.		 24.2%	(336)
I work part-time within the IT field.		—— 14.4%	(200)
I work part-time in a non-IT related field.		= 1.6%	(22)
I work full-time within the IT field.		61.9%	(859)
I work full-time in a non-IT related field.		— 5.0%	(70)
I am unemployed.		— 5.4%	(75)
I prefer not to say.		a 2.5%	(34)
	T (0.40		



Table 2-18 charts the responses by translated survey.

Answers key for Table 2-18:

- A I am a high school student
- B I am a student at a college or university
- C I work part-time within the IT field
- D I work part-time in a non-IT related field
- E I work full-time within the IT field
- F I work full-time in a non-IT related field
- G I am unemployed
- H I prefer not to say



Language	Α	В	С	D	E	F	G	н
Brazilian Portuguese	2	28	8	0	63	3	1	2
English	7	55	46	8	258	19	23	11
French	1	10	4	0	25	2	4	1
German	26	162	108	10	398	39	38	16
Italian	0	1	0	0	6	0	1	0
Mexican Spanish	0	10	8	1	23	2	1	0
Polish	11	70	26	3	86	5	7	4
Total:	47	336	200	22	859	70	75	34
Total as a percentage:	3.38%	24.22%	14.41%	1.58%	61.93%	5.04%	5.40%	2.45%

Table 2-18: What is your current working status?

Since responders could select multiple responses, the total number of responders, 1387, was used in calculating the total as a percentage.



3 Concluding Remarks

3.1 Summary of Results

The Test Delivery Survey provided an excellent opportunity to gather feedback from the BSD community regarding the location of potential exam candidates, the cost candidates are willing to pay to take the exam, and the test delivery methods exam candidates are willing to use to take the exam. This feedback can be summarized as follows:

- The number of responders who say they will take the exam (1153) is in-line with the BSDCG's estimate of 1000 testing candidates.
- The BSD community has concerns regarding the availability and affordability of certification exams and the value employers attribute to certification exams; the BSDCG should attempt to address these concerns.
- As predicted, testing candidates are scattered throughout the globe; having a list which contains over 350 cities in 58 countries provides focus as to where testing centers should be located.
- The majority of testing candidates are willing to travel to take the exam.
- Having translated versions of the exam is important to many testing candidates; translations should be of high quality and acknowledge that many IT terms should remain untranslated.
- The community is split on whether conferences are an appropriate venue for exam taking; the BSDCG now has a list of regional conferences should they decide to further explore this avenue.
- 70% of testing candidates are unwilling to pay more than \$100 USD to take the exam; the cost of using a test delivery solution will have to fall below this price point and still allow for the costs of psychometric analysis and administration of the BSDCG organization.
- Over 85% of exam candidates will themselves pay the cost for taking the exam.
- Nearly 85% of testing candidates would consider using a custom test delivery solution, with nearly 55% perceiving this solution as the least expensive of the three presented options.



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- Over 40% of testing candidates are not willing to take a paper based version of the exam. As this is the most common method used at conferences, this may account for the split in willingness to take an exam at a conference. The BSDCG may wish to investigate a non-paper based testing method which could be made available to conference attendees.
- Only 4% of responders perceived commercial delivery solutions as more secure than a custom solution.
- If a custom solution is developed, it needs to ensure geographic availability and a mechanism which provides easy payment and registration.
- Over 96% of responders are male; the BSDCG may wish to consider study material and training programs targeted at females.
- 55% of testing candidates fall between the ages of 21 and 30.
- Nearly 62% of testing candidates currently work full-time within the IT industry. This level of experience may be a reflection that currently no official study guide or training materials exist and that more experienced testing candidates are planning to self-study from the published exam objectives. Once official guides and curricula are published, the BSDCG should launch another survey to see if the testing audience remains the same.

3.2 Future Direction

Given the low volume of testing candidates and the costs associated with delivering an exam and its required translations using commercial test delivery solutions, it will be nearly impossible to use those solutions and keep the exam price under \$100 USD.

The BSDCG should consider the creation of an alternative test delivery solution which is globally available, affordable, and secure. Ideally, this solution would be used by existing testing centers to take advantage of existing proctoring and test candidate identification procedures. The solution should also incorporate secure and well proven registration and payment mechanisms. The solution should not require an annual fee or publication fees; alternately, if these fees are deemed necessary, they should be inexpensive and be reflective of a low-volume testing market.

The BSDCG is aware that other organizations with a low volume of testing candidates have either stayed out of the certification market entirely or are struggling with the costs associated with the current commercial offerings. The BSDCG welcomes input from such organizations and is willing to collaborate on a solution which better addresses the needs of a low-volume testing market. If your organization is interested, please send an email to <u>chair@bsdcertification.org</u>.

