

BSD Certification

Program Roadmap



The certification program roadmap of the BSD Certification Group

This publication introduces the planned BSD system administrator certifications and the construction of the certification program. It discusses the targeted audience and the objectives for the curriculum and testing methodology subgroups. It also includes estimated time frames for certification program development.

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PREFACE

A roadmap is a useful tool in any undertaking involving more than a few people. It helps guide the activities of the group by presenting a shared vision of direction and purpose. It also helps the group focus on specific activities that move the group forward instead of wasting time and effort on duplicate, unrelated, or marginally helpful tasks.

This is particularly true for an effort which is community driven in an organized fashion. Open discussions and critiques require an open model like the BSD operating systems that this certification intends to cover. The BSD Certification Group relies on feedback and community involvement to help make this certification program the best it can be.

In the coming weeks and months there will be many tasks and activities that need the effort of interested volunteers. The BSD Certification Group encourages everyone to join in making this program a success. See Section 6 in this document or the '[Contact Us](#)' page on the website for information about getting involved.

The BSD Certification Group
www.bsdcertification.org

August 25, 2005

Table of Contents

<u>Preface</u>	<u>iii</u>
<u>Executive Summary</u>	<u>v</u>
<u>1 Introduction.....</u>	<u>7</u>
<u>1.1 Scope of This Document.....</u>	<u>7</u>
<u>1.2 Accreditation.....</u>	<u>7</u>
<u>2 Quick Start.....</u>	<u>8</u>
<u>3 Target Audiences.....</u>	<u>9</u>
<u>4 BSD Certification Program Roadmap.....</u>	<u>10</u>
<u>4.1 Target Operating Systems</u>	<u>11</u>
<u>4.2 Certification Program Deliverables.....</u>	<u>11</u>
<u>4.3 Code Names.....</u>	<u>12</u>
<u>4.4 Certification Planning And Roll Out.....</u>	<u>12</u>
<u>4.5 Level of Effort Estimate.....</u>	<u>17</u>
<u>4.6 Preliminary Time Frames.....</u>	<u>20</u>
<u>5 Standalone Requirements.....</u>	<u>22</u>
<u>5.1 Sponsorship and Financial Management.....</u>	<u>22</u>
<u>5.2 Legal Incorporation.....</u>	<u>22</u>
<u>5.3 Certification Program Management.....</u>	<u>22</u>
<u>5.4 Project Management per Certification.....</u>	<u>22</u>
<u>5.5 Non-Disclosure Requirements.....</u>	<u>23</u>
<u>5.6 Test Methodology.....</u>	<u>23</u>
<u>5.7 Test Center Liaison.....</u>	<u>23</u>
<u>5.8 Employer Support Program.....</u>	<u>23</u>
<u>5.9 Verification Service.....</u>	<u>24</u>
<u>6 Getting Involved.....</u>	<u>25</u>
<u>7 Concluding Remarks.....</u>	<u>27</u>

EXECUTIVE SUMMARY

This roadmap is the third major activity initiated by the BSD Certification Group. After the release of the [Task Analysis Survey](#) and the [Task Analysis Survey Results](#), the Group focused on selecting the initial target audiences and developed this roadmap to coordinate all the activities that need to be completed to get the certifications from concept to successful deployment.

This roadmap clearly defines two target audiences, allowing the candidate to determine the certification most suited to their experience level. It lays out the tasks required to create a respected certification standard. These include curriculum definition, test question pool creation, psychometric testing, and integration with test vendors. Each task is described briefly and shown how it fits into the larger plan.

Also included is a preliminary project plan, with a Gantt chart, that provides a visual picture of how the certification program is laid out. This preliminary plan shows that the first certification ('associate' level) will take approximately eight months to develop. The second certification ('professional' level) will take about seven months. The development is overlapped, so the total time frame for the first two certifications is approximately eleven months. However, it's important to bear in mind that this estimate may vary due to a number of factors such as the amount of time each worker is able to contribute, the complexity of the curriculum, the number of questions needed in the question pool, availability of a professional psychometrician, and so forth.

Creating the certifications is only one part of the overall effort. There are a number of other, standalone tasks that must be completed, such as setting up sponsorships and financial arrangement, project management, non-disclosure agreements, test center liaisons, an employer support program and other essential tasks. These tasks will require even more effort than the actual test creation.

Section 2, **“Quick Start”**, contains a summary of the key points for the certification program. Section 3, **“Target Audiences”**, describes each target audience. Section 4, **“BSD Certification Program Roadmap”**, lays out the planning tasks, a level of effort estimate and preliminary time frames for creating the certification tests. Section 5, **“Standalone Requirements”**, presents the additional tasks described above. Section 6, **“Getting Involved”**, describes how to get involved in the BSD certification effort.

Finally, a word about accreditation.

The BSD Certification Group is considering accreditation for the BSD certification program by the National Commission for Certifying Agencies (<http://www.noca.org/ncca/ncca.htm>). However, an actual request for accreditation cannot occur until the exam itself has been taken by at least 500 candidates or after the exam has been available for at least one year. The NCCA has developed an excellent set of standards for credentialing organizations to use in setting up their programs. Regardless of the eventual decision to seek accreditation, the BSD Certification Group is committed to meeting these standards so the resulting BSD certifications will be held in the highest regard--much like BSD software itself to those who know it well.

1 Introduction

Developing a certification program is more than just putting together a list of questions and answers. A robust certification program includes project management for each certification, test center liaisons for service and scheduling arrangements, a verification service, and an employer support program. These activities are separate from curriculum and test development. The description of all these activities is contained in this roadmap.

Section 2, “**Quick Start**”, contains a summary of the key points for the certification program. Section 3, “**Target Audiences**”, describes each target audience. Section 4, “**BSD Certification Roadmap**”, lays out the planning tasks, the level of effort estimate and preliminary time frames for creating the certification tests. Section 5, “**Standalone Requirements**”, presents the additional tasks listed above. Section 6, “**Getting Involved**”, describes how to get involved in the BSD certification effort.

1.1 Scope of This Document

This document is not a study guide for achieving BSD certification.

Rather, it is a guide for the development of the certifications themselves. Being a roadmap, it refers to other documents yet to be created and published on the website. These other documents include **Educational Guidelines**, one for each defined certification, which will define the available study guides and preparatory materials.

This roadmap also does not discuss a business plan or revenue model for producing BSD Certifications. There will be a publicly available **BSD Certification Business Plan** which will outline sponsorship, incorporation, and business and financial planning.

While this document contains some project planning details, it is not the actual **BSD Certification Project Plan**. The Project Plan contains a continuously updated view of the [Gantt](#) chart and additional notes about the current status of the project. See Section 4.2 for a document map.

1.2 Accreditation

While anyone can develop and market a BSD certification, it remains important that the resulting certification be held in high regard by candidates, employers, sponsors and the entire BSD computing community. The BSD Certification Group is committed to meeting the standards required to apply for accreditation with the National Commission for Certifying Agencies (NCCA) (<http://www.noca.org/ncca/ncca.htm>). This organization provides guidelines to certification development that ensure the highest standards of excellence.

2 Quick Start

This section presents a quick summary of the key points of the certification program. The remainder of this document describes all these points in detail.

An '**associate**' level certification (for less experienced candidates) and a '**professional**' level certification (for more experienced candidates) are scheduled for roll out in 2006. The key development dates are:

Table 2-1: Quick Start View of Key Dates for the BSD Certification Program

Associate Certification Key Dates		Professional Certification Key Dates	
Project Start	Aug 25, 2005	Project Start	2006 Start Date To Be Determined
Certification Requirements Document	Oct 4, 2005	Certification Requirements Document	(Start + 42 days)
Educational Guidelines	Dec 15, 2005	Educational Guidelines	(Start + 114 days)
Exam Preparation and Testing	Dec 15, 2005 – Apr 4, 2006	Exam Preparation and Testing	(Start + 114 days)
Test Activation	Apr 5, 2006	Test Activation	(Start + 225 days)

The audience descriptions are contained in Section 2. They map to the SAGE Junior level and Intermediate/Advanced level, respectively.

The certification program is focused on specific BSD systems- [FreeBSD](#), [OpenBSD](#), [NetBSD](#) and [DragonFly BSD](#). Each certification, its target systems, and the curriculum and objectives covered will be fully described in a **Certification Requirements Document**. The Certification Requirements Document for the associate certification will be ready on Oct 4, 2005. An **Educational Guidelines** document containing recommended areas of study for the associate certification will be available on Dec 15, 2005. Candidates desiring specific information on the associate certification should read both documents.

The development of the professional certification is currently scheduled to start in January, 2006. A Certification Requirements Document should be ready within approximately 42 days and an Educational Guidelines document should be ready within approximately 114 days from the start of development. Candidates desiring specific information on the professional certification should read those documents when they become available.

3 Target Audiences

This section defines and briefly describes the target audiences for the initial BSD certifications. After reviewing the Task Analysis Survey Results, the BSD Certification Group has selected two main audiences for certification: a less experienced audience and a more experienced audience.

These are described as follows:

- **Less Experienced Audience**

This audience includes those with light to moderate skills in system administration and maps to the Junior SAGE Job Description (<http://www.sage.org/field/jobs-descriptions.mm#Junior>). This candidate uses basic system administration commands- starting and stopping the system, adding, changing and deleting users; performing basic network setup; backing up and restoring files and resolving disk space issues; performing simple scripting.

Note: The certification targeted at this audience will not be appropriate to a complete novice as it assumes familiarity with basic Unix skills and some experience as a system administrator. The BSD Certification Group will consider how to best meet the preparation needs of a novice audience so that they can work their way up to this level.

- **More Experienced Audience**

This audience includes those with stronger skills in BSD system usage and administration and maps to the Intermediate/Advanced SAGE Job Description (<http://www.sage.org/field/jobs-descriptions.mm#Intermediate>). This candidate uses advanced administration commands (in addition to those above) and performs more complex administration tasks- setting up distributed filesystems, managing DNS, troubleshooting and resolving network issues; creating complex scripts to automate or manage processes, files, users, and data; keeping the system up to date with patches and security fixes; installing new systems; setting up and resolving printing issues; tuning for performance.

The above descriptions are not the only tasks performed at these levels, but serve as a guide to understanding the capabilities at each level.

Eventually, the BSD Certification Group may define other audiences for other certifications. Check the website for up to date details.

4 BSD Certification Program Roadmap

This section introduces the BSD certification program roadmap and describes the tasks needed to establish BSD certifications. Preliminary 'level of effort' and time frame estimates are also included.

Figure 1 shows the key elements of the roadmap.



Figure 1: BSD Certification Roadmap

For the purposes of this document, "Deliverable" refers to documentation to be published on the website.

The key elements of the roadmap include a collection of tasks to create certifications, as well as tasks to develop the certification program itself- i.e. the supporting environment and infrastructure. Section 4 discusses the tasks common to producing certifications. Section 5 discusses the other standalone tasks.

4.1 Target Operating Systems

The certifications themselves are based on specific BSD systems; namely [FreeBSD](#), [OpenBSD](#), [NetBSD](#) and [DragonFly BSD](#). While other BSD systems may be considered in the future, only these four operating systems will be considered in the initial core offerings.

Specific versions of each operating system are discussed in the Certification Requirements and Educational Guidelines documents for each certification. These versions will of course, change over time. Consult these documents on the website for up to date information.

The more advanced certifications require additional knowledge of system administration techniques and procedures. The Certification Requirements and Educational Guides define these levels in more detail.

4.2 Certification Program Deliverables

Figure 2 shows the primary documentation set planned by the BSD Certification Group. The current version of each document will always be available on the website. The monthly newsletter will contain highlights of that month's changes. In addition, the BSD Certification Project Plan will be continuously updated.

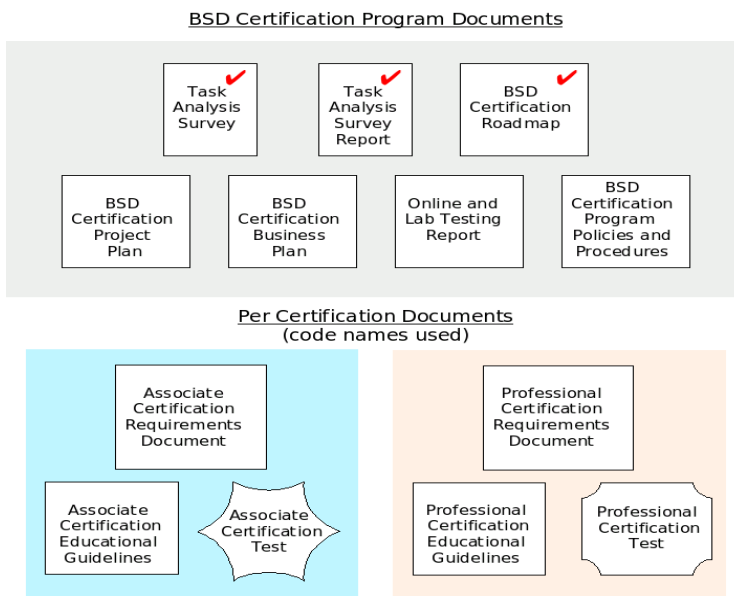


Figure 2: BSD Certification Program Deliverables

Section 5 discusses the program documents, while the per-certification documents are discussed in the remainder of Section 4.

4.3 Code Names

The names of the actual certifications are not presented in this document. They are specified in the Certification Requirements Document produced by each certification subgroup. As each Requirements Document is readied, the certification name will be published.

The code names '**associate**' and '**professional**' are used to describe the certifications discussed in this document. These names correspond to the target audiences described in Section 3. The associate certification is the appropriate certification for the less experienced audience and the professional certification is appropriate for the more experienced audience.

4.4 Certification Planning And Roll Out

Note:

For the initial roll out, the BSD Certification Group has decided that the associate level certification, followed by the professional level certification will be rolled out in 2006.

It is not necessary for candidates to take both exams, only the exam for which they feel qualified.

The remainder of this section describes the planning activities for creating these certifications.

The following activities comprise a template for creating BSD Certifications. No dates are included in this section as the template and activity list is meant to be reused as certifications need to be defined. The activities are arranged in outline order to give a sense of their relationships.

Certification Template**Certification Requirements Document (Deliverable)****Test Preparation****Test Question Pool****Educational Guidelines (Deliverable)****Test Unit Construction****Test Unit Testing****Active Testing****Psychometric Testing****Translation****Translate Test Unit****Translation Verification****Test Center Preparation****Software/Hardware Preparation****Test Center Preparation****Test Center Verification****Proctor Preparation****Integration Test****Test Activation and Announcement (Deliverable)**

The tasks and relationships are further described in the following sections. (The outline indentation in the list above is used below as a visual aid.)

Certification Template

This is a container task for the entire certification development.

Certification Requirements Document (Deliverable)

The Requirements Document for the certification specifies the following information:

1. Name of the certification and examination.
2. Description of exam components.
3. Decision on which BSD(s) and version(s) the examination will cover.
4. Curriculum definition for the certification. The definition contains specific topics that are covered by the certification.
5. The list of objectives, derived from the curriculum definition for each of the topic areas for the examination. This list is an active part of the test creation activity and is expected to change as the test matures.

Test Preparation

Test Preparation is a container task for producing the certification test.

Test Question Pool

The Test Question Pool task collects and analyzes all questions for each topic area of the certification. Questions for each topic are received from current system administrators, educators and trainers, as well as the BSD community at large and are reviewed by subject matter experts (SMEs) for correctness. Questions that are not applicable to any topic in the current certification are stored for possible later use.

The Test Question Pool also contains a selection of scenarios for the hands-on lab tests. These scenarios are developed to test actual performance of system administration skills. Each scenario requires the candidate to perform some set of tasks or actions to resolve a problem or satisfy a condition. The hands-on lab is not required for every certification; only those noted in their Certification Requirements Document.

Educational Guidelines (Deliverable)

Once the selection of all test questions is complete, Educational Guidelines are produced that cover the range of questions within the topic areas. The guidelines must include all topics and must reference each objective stated in the curriculum. The guidelines describe the topics and objectives in sufficient detail so that educational materials may be produced by interested parties.

The Educational Guidelines form the boundary between the BSD Certification Group and those wishing to produce educational materials. All educational materials are therefore developed from the same base reference material. This puts every provider of educational material on an equal footing.

Test Unit Construction

This task actually creates the Test Unit, merging content and delivery method. The online delivery method is the selected test engine used to administer the test. The hands-on delivery method is the method selected for administering the hands-on lab. (The choice of these delivery methods for the entire certification program is performed by the Test Methodology subgroup- see Section 5.6). Content is taken from the test question pool.

A Test Unit contains enough random questions or scenarios to generate multiple certification exams with a minimal chance of repeated questions in a majority of controlled cases. This ensures that the test question pool cannot be easily memorized.

Test Unit Testing

Test Unit Testing is a container task for validating the test. The activities in this section can proceed independently of each other.

Active Testing

The Active Testing task tests the Test Unit- actively engaging volunteer testers to check the test questions, and recommend any changes to question and answer content, format, style, layout, or selection. Volunteers are only provided with a very small set of questions for review to prevent overexposure of the question pool. This task is similar to beta testing in software projects.

Psychometric Testing

Psychometric Testing, conducted by a qualified psychometrician, tests the Test Unit for correctness, internal consistency, and repeatability. A successful review for psychometric correctness is required not only for NCCA accreditation but also for ensuring the credibility and completeness of the testing methodology.

Translation

Translation is a container task for completing test translations.

Translate Test Unit

Once the Test Unit is completed and tested, it is turned over to translators who, under NDA restrictions, translate the test question pool into their preferred language.

Translation Verification

Once translations are completed, each Test Unit must be checked by others (also under NDA restrictions) in the same language. This ensures that the test meets the highest quality standards of word usage, grammar, and style in the indicated language and that the test questions are free of any cultural bias.

Test Center Preparation

Test Center Preparation is a container task preparing the test centers for receipt, installation, and preparation of the completed Test Unit.

Software/Hardware Preparation

Software and hardware preparation of the Test Center is necessary to ensure that the correct test administration software is available and that the hardware used meets the minimum requirements needed by the test software. In the case of a 'hands-on' lab, the hardware and software combination must be verified before use. The BSD Certification Group is aware that hardware availability varies across the globe and will take this into consideration when choosing the testing methodology.

Test Center Preparation

Preparation of the Test Center includes installing the test and configuring the test administration software to use the new test. The installation procedures may require assistance from a test delivery vendor if one is selected for online test delivery.

Test Center Verification

Test Center Verification performs an acceptance test as new test units are implemented, and whenever software or hardware is newly installed or configured. This ensures a reliable test environment for all tests.

Proctor Preparation

To preserve the integrity of the test environment, proctors must be registered and trained in administering the test. It is expected that each certification test will be similar in content and distribution, so this task may not need to be repeated for each new certification test.

Training proctors to handle the test distribution and manage various situations provides a more professional test environment.

Integration Test

The Integration Test is the last test before the certification goes live. The Integration Test runs through the entire set of activities- scheduling, certification test download, test completion, results upload, scoring, and result posting into the verification database. Once the Integration Test is complete, the Test Unit is available for activation.

A complete Integration Test Plan will be available in the **BSD Certification Project Plan**. See that document for additional details.

Test Activation and Announcement (Deliverable)

Activating and announcing the Test Unit availability completes the certification preparation activities. While the certification itself is now complete, it is still subject to ongoing review to ensure the certification is testing current and relevant material. The details of this review process will be published in the BSD Certification Program Policies and Procedures document referenced in Section 5.3.

4.5 Level of Effort Estimate

Figure 3 and Figure 4 show a project plan with a Gantt chart (using [ganttproject](#)) containing the above tasks and their relationships. It shows a 'level of effort' view of the initial (associate) certification. The resulting estimate is approximately eight months, but this may vary due to many factors, such as the amount of time each worker is able to contribute, the complexity of the curriculum, the number of questions needed in the question pool, availability of a professional psychometrician, and so forth.

BSD Certification Program Roadmap

August 25, 2005

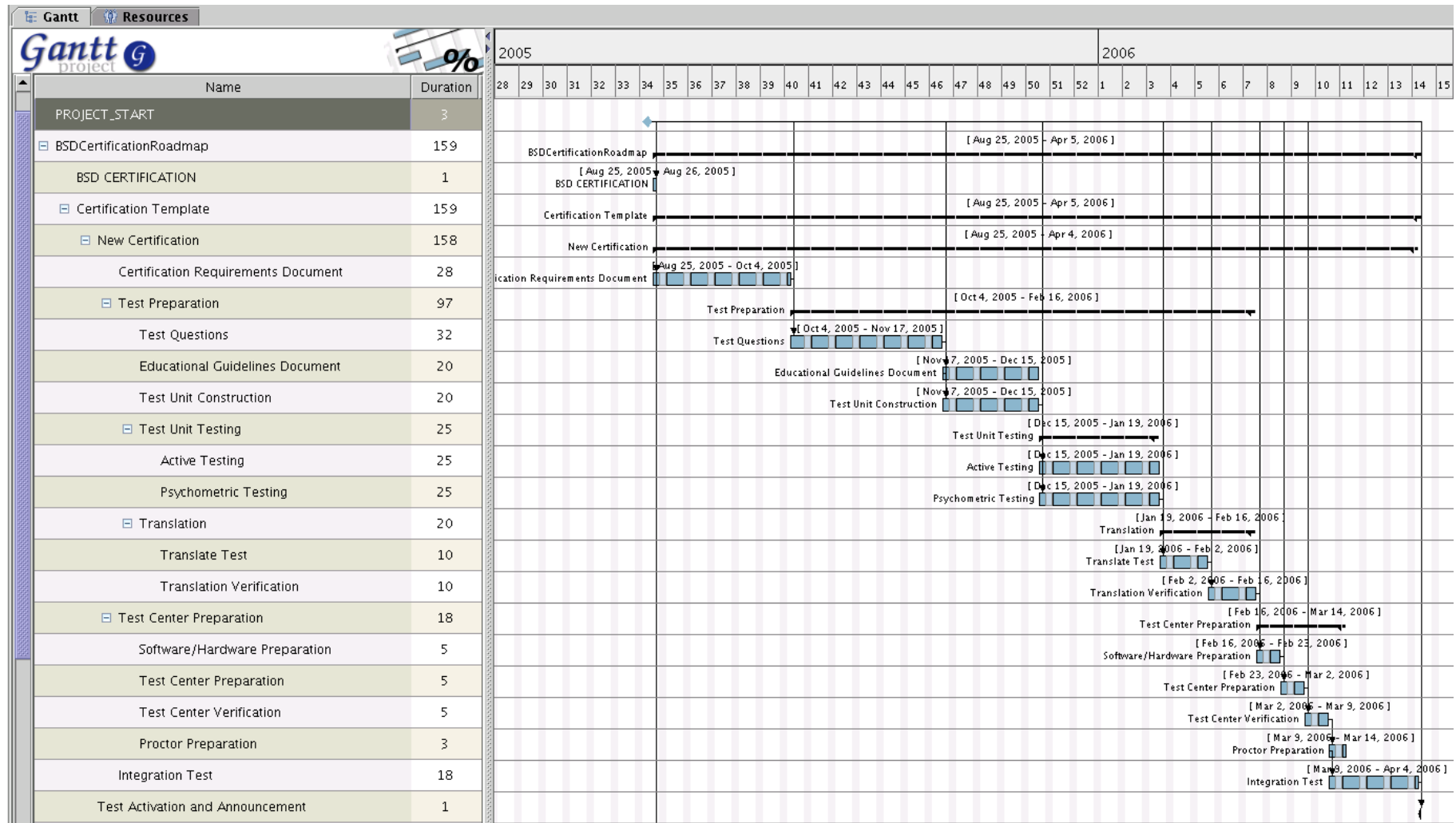


Figure 3: BSD Certification Program Development Gantt Chart, Part I

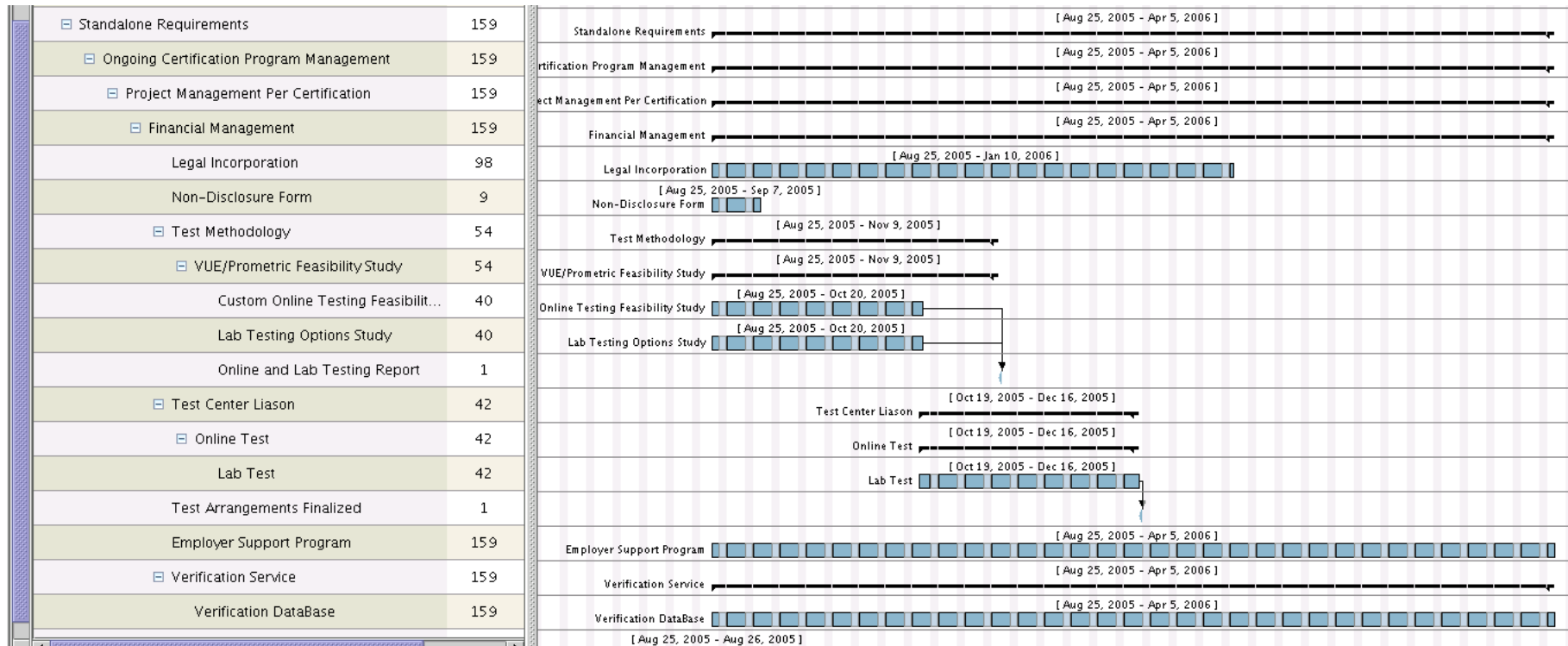


Figure 4: BSD Certification Program Development Gantt Chart, Part II

BSD Certification Program Roadmap

August 25, 2005

These time frames allow for the majority of the initial work on organization and infrastructure to be done up front and reused for later certifications.

Table 4.6-1 shows a schedule for both the "associate" and "professional" certifications.

Table 4.6-1: BSD Certification Development Key Dates.

Associate Certification Key Dates		Professional Certification Key Dates	
Project Start	Aug 25, 2005	Project Start (Start date TBD)	(Begin Dates)
Certification Requirements Document	Aug 25 – Oct 4, 2005	Certification Requirements Document	(Start + 0days)
Test Question Pool	Oct 4 - Nov 17, 2005	Test Question Pool	(Start + 42 days)
Educational Guidelines Document	Nov 17 - Dec 15, 2005	Educational Guidelines Document	(Start + 86 days)
Testing and Translation	Dec 15, 2005 – Feb 16, 2006	Testing and Translation	(Start + 114 days)
Software/Hardware Preparation	Feb 16 – Feb 23, 2006	Software/Hardware Preparation	(Start + 177 days)
Test Center Preparation	Feb 23 – Mar 2, 2006	Test Unit Preparation	(Start + 184 days)
Test Center Verification	Mar 2 – Mar 9, 2006	Test Center Verification	(Start + 191 days)
Proctor Preparation	Mar 9 – Mar 14, 2006	Proctor Preparation	(Start + 198 days)
Integration Test	Mar 9 – Apr 4, 2006	Integration Test	(Start + 198 days)
Test Activation	Apr 5, 2006	Test Activation	(Start + 225 days)

5 Standalone Requirements

Additional requirements for getting BSD Certification off the ground include financial and project management for each certification, test center liaisons for service and scheduling arrangements, a verification service, and an employer support program. These activities are totally independent of curriculum, educational, and test development.

These activities are described in the following sections.

5.1 Sponsorship and Financial Management

Details of sponsorship plans and financial management will be found in the **BSD Certification Business Plan** document available from the website. Briefly, the following will be considered in the Business Plan:

- Legal incorporation as a non-profit, non-governmental organization (NGO)
- Financial sponsorship plan for interested organizations
- Test center and hands-on lab liaison development
- Revenue model, projected expenses and other financial details

5.2 Legal Incorporation

Incorporation of the BSD Certification Group is necessary to secure financial arrangements with sponsors and other interested parties. It is also required for NCCA certification, and will provide a basis for organization to organization interaction.

5.3 Certification Program Management

Ongoing certification program management is required to establish and monitor quality control procedures, handle disciplinary concerns and appeals, ensure the continued integrity of the test materials, and to provide consistency and fairness to the program as a whole. Some of these are required by the NCCA standards, while others are common sense.

The **BSD Certification Program Policies and Procedures** document addresses these concerns.

5.4 Project Management per Certification

It is expected that an initial certification will take approximately eight months to produce from start to first test availability. Each certification will require project

management skills to guide the development forward over time- coordinating curriculum developers, test constructors, psychometricians, test center managers and so on.

The **BSD Certification Project Plan** contains a continuously updated summary of the project status.

5.5 Non-Disclosure Requirements

A Non-Disclosure Agreement is used by the BSD Certification Group to protect the certification development and materials. All project managers, curriculum developers, testers and translators are required to submit a completed agreement in writing, or via public key signature, before beginning their activities. Further details on submitting agreements will be posted on the website.

5.6 Test Methodology

The test methodology for online testing is the responsibility of the Test Methodology subgroup. The selection or creation of a test engine is a key component of the certification. As the certification program matures, changes in methodology will be handled by the Test Methodology subgroup.

The Test Methodology subgroup also has responsibility for the design, operation and maintenance of the hands-on lab environment used for the more advanced certifications.

In keeping with the community nature of this certification, the BSD Certification Group invites all interested parties to submit questions and lab scenarios for use in the tests. Submission guidelines will be available on the website.

5.7 Test Center Liaison

The Test Center Liaison subgroup maintains contacts with testing centers that participate in BSD Certification. The contacts include testing centers, liaisons with conference groups, academic centers, and others providing BSD Certification. The subgroup arranges testing, and keeps track of test versions in use at the various locations. They are also responsible for proctor registration, and for handling any unusual situations that arise in test environments, such as cheating, proctor fraud, and unauthorized distribution of test materials.

5.8 Employer Support Program

The Employer Support Program is an important part of the the BSD Certification effort. This program provides several resources for employers who are interested in BSD Certification or who already employ BSD system

administrators.

The resources provided by this program are:

1. BSD Certification Summaries

These summaries will provide a concise view of each BSD Certification and present the list of topic areas covered by each certification. The summaries will also describe the certification accreditation program (see Section 4.2).

2. Referral Service

The BSD Certification Group will maintain a list of training and education providers that may be of interest to employers seeking to acquire certifications for their employees.

5.9 Verification Service

A verification service provides Human Resources and other interested parties a way to verify a claim of BSD Certification. Candidates who successfully pass the requirements will receive a certification number, which is linked to details about their current certification status. Verification service details will be available on the website. The service will provide at least: name, certificates held and certification numbers, dates acquired, dates expired, dates recertified, location acquired, proctor id, test names and versions, and OS coverage.

Additional requirements may be added in the future to maintain compliance with the NCCA standards.

6 Getting Involved

This section contains information regarding the organizational structure which will be used to ensure the tasks outlined in this roadmap are completed. The [BSD Certification Group](#) is structured around subgroups. Each subgroup will be headed by at least one Group member who has experience or expertise in the field covered by that subgroup. The following subgroups are defined here, though more may be added in the future:

1. Certification Definition Subgroup – This subgroup is chartered by the BSD Certification Group for setting up a new certification from concept to reality. The subgroup will define the certification requirements, curricula, and Educational Guidelines. The subgroup is also responsible for managing the project tasks for completing the certification such as creating the test pool, translating test questions and integrating it all into the testing methodology used by the BSD Certification Program.
2. Test Methodology Subgroup – This subgroup researches and/or defines the test methodologies used for administering examinations. Selection of suitable test delivery vendor(s) and architecture of a hand-on lab environment are performed by this subgroup.
3. Test Center Liaison Subgroup – This subgroup maintains relationships with test centers or organizations that administer tests. Tests may eventually be administered worldwide, so this group may include participants from many countries.
4. Business Operations Subgroup – This subgroup will create and maintain the BSD Certification Business Plan. As the certification program grows and matures, this subgroup will evaluate the progress of the program and suggest appropriate changes to the plans for business development, marketing, public relations.
5. Policies and Procedures Subgroup – This subgroup will create and maintain the BSD Certification Program Policies and Procedures document. This document will define quality control procedures, disciplinary concerns and appeals, and other procedures needed by the program. Policies and procedures defined by this group will be used in ongoing program management.

Before volunteering for a subgroup, it is important to understand how this certification project differs from other Open Source projects.

In most projects, there is complete transparency of information flow. Source code, patches, design details, artwork, and many other shared items flow back

and forth freely across the project. There is little need to protect information from disclosure.

A certification project by its nature is somewhat different. The project goal is validating acquired knowledge and skills. It is the steps involved in validation that require more careful handling of information flow within the project. If all questions and answers were freely available before an examination, there would be little credibility to the examination and the resulting certification.

Some subgroups may work on tasks that require confidentiality. This is generally true of the subgroups that handle test creation, translations or exam verification. In these subgroups, a Non Disclosure Agreement (NDA) will need to be executed by all subgroup members. Other subgroups may only handle public, freely available information and will not need an NDA.

Once the subgroup has completed their research and achieved consensus on the best method for accomplishing their task, the subgroup will record their recommendations to be presented to the BSD Certification Group. The Group will review those recommendations and use those to achieve any deliverables associated with that subgroup.

As required, subgroups will use collaborative tools for those working on a common task. These may include mailing aliases, Wiki areas or private chat channels. Community members are encouraged to donate collaborative tools or suggest improvements on how their subgroup works collectively.

In all cases, Group members will solicit community input for specific tasks from the public [BSDCert](#) mailing list. Community members are also welcome to join any subgroup by either responding to requests for help or by stating the tasks they wish to assist with using the '[Contact Us](#)' tab on the BSD Certification website.

7 Concluding Remarks

The preceding sections highlight the tasks and challenges of creating a highly respected certification for BSD system administration. As shown, the project is equivalent to a medium sized corporate IT project. Clearly, this is a substantial undertaking.

As with any large project, overcoming the challenges will take the dedication and commitment of many individuals in the BSD community. This roadmap provides vision and direction, but it remains to the community to get involved and help bring these certifications to reality. The BSD Certification Group welcomes all who desire to share in this effort.

Check the website for email lists, sponsorship details, news and additional information and for updates on the documents referenced in this roadmap.