

LPI Certification

In the previous article I talked about Linux+ certification and why it is a good certification path to follow. As with everything with Linux, you have a choice as to which way is best for you. There also is a [Linux Professional Institute \(LPI\) certification](#) which offers its own advantages. While the Linux+ track is better for those involved in a mixed environment, the LPI track is better suited for those involved in a *nix environment.

The path for the LPI certification follows a similar path as the Linux+ exam. When looking at which certification path to take technicians need to look at what environment they are involved with. Those looking to pass the LPI exam should have about 6 to 12 months of experience working in a Linux environment and the person can run a stand-alone Linux system and perform basic administrative jobs. One of the bigger differences between the two tests is that there seems to be a larger international community supporting the LPI exam.

Novell is keeping with the idea of using the LPI exams as a preferred requisite for the Novell exams, the LPI exam has been a requirement with the SuSE track of certifications. This follows the idea we covered in the previous article of having two tracks for Linux certification, one for an introduction and the other which allows technicians to specify which products they will focus on. The concept of modularity is a key principle to Linux development and this includes when you plan your career development. One of the ideas evolving is to use a vendor-neutral certification to get your start in the industry and expand from there to specific vendor-specific certifications depending on which systems you primarily work with.

LPI has two levels (LPIC-1 and LPIC-2) with a third in the development stage. Each of the two levels is made up of two tests. The first test for the LPIC-1 has two options based on the different package managers which are available, one for red Hat's RPM and the second for Debian's DPKG. When you register for your first test you will choose between one of the two options and there will be a number of questions covering that particular package manager. The LPIC-1 101 test is made up of 65 questions with a small number of questions concerning the package manager you chose to be tested on. The LPIC-1 102 test is made up of 73 questions. Grading for each test is on a scale of 200 to 800 with a passing score of 500. Both tests need to be passed in order to qualify for the LPIC-1 certification.

The objectives covered for the LPIC-1 101 exam include: Hardware and architecture, Installation and Package Management, Unix Commands, Devices, Linux File System Hierarchy standard, and the X Window system. The LPIC-1 102 exam objectives include: Kernel, Boot, Initialization, Shutdown and Run levels, Printing, Documentation, Shells, Scripting, Programming and Compiling, Administrative Tasks, Networking Fundamentals, Networking Services, and Security

LPI uses several methods to ensure the materials on their exams are appropriate for those taking the exam. This process results in using a range to judge each test individually and verify that a minimally qualified candidate taking the exam should be able to answer each question. This ensures that the

questions on the exams are appropriate for the level of the exam and sets a minimum standard for when changes are made to the exam the new questions will be appropriate. Recently LPI has started a new policy where they are adding beta questions on the exam. The beta questions are not included in the scoring for the exam. The beta questions will allow LPI to add to their question pool faster rather than going through a beta phase before reorganizing their exam.

When preparing for a LPI exam there are a number of options available which LPI has identified and which other companies have made available for someone to use.

LPI has identified several companies which are providing resources for the LPI exams, Bradford Learning, Linux Certified, Linupfront.de and several others. These companies usually provide sample chapters of their courseware on their sites. The advantage these companies provide is hands-on training with experienced instructors who you can ask questions of during the course.

There are several sites which have posted their Linux training material as Open source material. [LinuxIT](#) has published their course and make it available as a free download. The courses can be found in .sxw format on the nongnu site. [IBM](#) has developed an area within their site which they offer up tutorials on preparing for Linux certification. [David Horton](#) has published an LPI exam study guide on the internet which is good to use. All of these sites offer up a framework from which one can study on their own for the exam.

If you want to ask someone who is actively studying for one of the exams another good site to visit is the [LPIForums.com](#) site. There are a number of active discussions which are focused on any questions you might have in regards to LPI certification.

To help familiarize testers to the environment of an LPI exam there are several sites which offer sample test questions. The [linux-praxis.de site](#) and [ph-home.de site](#) focuses on offering LPI questions and answers in a format which is similar to what you will find on the actual test. The [Question of the Day site](#) offers up a daily email with a question which is directed towards one of the two first level tests.

Finally, there are a couple of books which have helped people prepare for the exams, they are LPI Linux certification in a Nutshell by Jeffrey Dean and LPI Exam Cram 2 by Ross Brunson.

Evan Leibovitch the President of LPI was kind enough to conduct a phone interview after he had finished a Linux conference in Senegal Africa for four French speaking nations focusing on training people to proctor Linux exams. Evan is actively involved in the international community to bring Linux certification to anyone who needs it.

The Exam LPI 101 provides a choice to the candidate depending upon their expertise; either in additional questions in the Redhat or the Debian package manager. There are only a small number of questions that focus on the package managers and this is due to LPI's stance on providing a

distribution neutral program. These package managers have been the standard for Linux installation of software for sometime now.

When asked about when the LPI was going to add newer topics into the LPI exams, Evan mentioned that LPI uses the Linux Standard Base as a guide for what a Linux system will universally use. The Linux Standard Base is still on version 2.0.1 and doesn't change often. LPI is focused on providing a standard on which candidates can prove their knowledge for various levels of Linux support and administration. A technician holding an LPI certification will be able to work on any flavor of Linux.

LPI is constantly adding new questions into the pool which are focused on the current objectives. There is an exact process which must be followed before a question can be added to the exam and considered a score able question. Normally there is no flexibility when adding questions to a question pool on a certification exam. LPI choose this process to enable their exam to stay live. One of the ways LPI collects statistics on questions is to include them as beta questions on the live exams. These beta questions are not score able but they are not separated form score able questions. This will also stop people from producing braindumps on the exam, which limits the integrity of an exam.

I asked Evan what he is doing in regards to working with other groups and Evan reminded me that LPI is strictly Vendor Independent. SuSE has used the LPI exams as a prerequisite for the exams and Novell recommends applicants for their Novell Linux exams have passed the LPI exams before attempting the Novell exam. Also LPI does work with several firms and is sponsored by several firms throughout the Linux community.

LPI is also reaching out through Local Linux Users Groups, Novell User International, and various Linux trade shows to promote LPI testing events. The next LPI event will be in Boston at LinuxWorld in February 2005 as well as at other LinuxWorld events across the country. LPI is also involved with CeBIT events in Germany and Linux.Conf.Au events in Australia. Evan just finished an event in Africa that helped four French speaking countries in proctoring Linux exams.

I asked Evan what LPI does to help direct people to what to study for the exam, while LPI does not prepare or sell training material, they do offer some guidelines for others who do have material on their website <http://www.lpi.org/latm.html> Evan said they encourage candidates to follow the LPI objectives and take their own path towards certification which may or may not include formal education.

Finally, Evan mentioned that LPI is actively reviewing the new LPI level III certification and in 2005 he expects to make a big formal announcement regarding a new level III certification that will be radically different from the two other LPI certifications.

There should be some very big moves done in 2005 in regards to Linux certification and it will be an exciting year for Linux overall.

Links:

LPI: <http://www.lpi.org/en/lpic.html>

LPI Forums: <http://www.lpiforums.com/>

NonGNU site: <http://www.nongnu.org/lpi-manuals/downloads.html>

IBM Developer Works: <http://www->

[106.ibm.com/developerworks/views/linux/tutorials.jsp?sort_order=desc&expand=&sort_by=Date&show_abstract=true&view_by=Search&search_by=%28release+2%29&S_TACT=104AHWo3&S_CMP=ZHP](http://www-106.ibm.com/developerworks/views/linux/tutorials.jsp?sort_order=desc&expand=&sort_by=Date&show_abstract=true&view_by=Search&search_by=%28release+2%29&S_TACT=104AHWo3&S_CMP=ZHP)

David Horton site: <http://www.happy-monkey.net/LPI/LPI-Self-Study-Guide.html>

Linux-praxis.de site: <http://www.linux-praxis.de/lpisim/lpi.html>

Ph-home.de site: <http://www.ph-home.de/linux-test/lpi-1/index.php>

Questions of the Day: <http://qod.us/>

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