## LPI Certification

# Testing, testing 1, 2, 3

The Linux Professional Institute (LPI) has been running certification exams for some time. We decided to see what happens when you sign up for a course. Would the course be only concerned with passing the exam or would they ensure that you understood why things occur and that the certification was worthwhile.

**BY JOHN SOUTHERN AND PATRICIA JUNG**



The LPI certification is dependent on passing exams. You can always study at home and just enter the exams, or you can sign up for a intensive study course to make the most of your time.

The TrainingCamp *http:www.trainingcamp.co.uk* offers courses throughout the USA and UK. At Tadley, just south of Reading the training is situated in a fantastic courthouse with 39 bedrooms and plenty of classrooms. Just to keep you physically healthy they have a gym.

The LPI level 1 course starts on a Sunday afternoon and the first 101 exam is taken on the Wednesday evening. The final 102 exam is either on the Saturday night or the Sunday afternoon.

Being a residential course, everything is provided and a free snack room with soft drinks and confectionary is available. There is a bar, but no-one seemed to use this with everyone too busy cramming or reading course material.

The Linux course was held upstairs overlooking the manicured gardens well away from the Cisco and MSCE classrooms.

The course suffered as this was the first week that the LPI exam had changed the 101 and 102 exams. Previously the course material had been supplemented with the O'Reilly book we reviewed in Linux Magazine August 2001 Issue #11. The changes have meant some of the topics have moved between the 101 exam and the 102 exam and NTP is now included.

The tutor was knowledgeable and cared about the exam. Presentation slides were used along with class participation along with working through every example on the laptops provided. This was to avoid making the certification just a matter of cramming. We have all heard about paper certification where candidates can just cram past questions without actually knowing real life examples and tricks.

This LPI course was determined to not allow any paper LPI certification by giving information beyond the scope of the course. This was helped by the fact that the tutor also taught the hardware A + exams along with the Linux + and Net + . The extra information was not intended for the LPI course although it was useful in understanding why things occur.

Because the exams test a wide range of knowledge, the course days are long. Not only 6 full days, but each day starts at 9am but finishes at 7pm for an evening meal then until the following morning the time is yours as long as you can keep up with the reading and working through more examples on your own.

The exams last for two and a half hours and are made up of between 98 and 102 questions. These are computer based and so are either multiple choice or fill in the blanks style.

Where the course makes the most difference is in the practical example that

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| **LPI:** | *http://www.lpi.org/* |
| **TrainingCamp:** | *http:www.trainingcamp.co.uk* |
| **Residential course cost:** | £2,500 +VAT |

you have to work through along with the hundreds of sample questions. Most of us would agree that sample questions alone would let us pass an exam, but the need for actually doing the tasks is the main part that we will come away with to use later in life.

The course numbers fluctuate, and it would be good to choose a smaller attended course as this gives a little more flexibility in the pace that it is taught. However in reality this is unlikely to be possible with other time constraints of daily life.

Asking around the attendees gave a few unusual answers to why people would want to attend the course. One was planning to migrate to Australia and wanted a qualification in a growing



**Figure 1: Tadley Court training center**

industry. Another was already MS qualified and the very large IT consultancy company that he worked for now counted the LPI as an equivalent to the MSCE. They did not count the RCSE at the same level as being consultants

they were expected to work on any distribution the clients want.

Having said that, on the course the main distributions used were Red Hat 7.3 and Debian Woody. The tutor did make the attendees install Mandrake and Knoppix as well, so everyone saw different systems in both text and graphical installs.

Overall the course was enjoyable, with something new every few minutes. The pace was fast and the long days meant it was tiring. On the downside was the use of PowerPoint for the presentations and the pre-course reading CD which included all the How-Tos and ManPages which could have done with some more direction towards what is important for the exam. ■

## LPI's future plans

Approximately 1,200 exams per month taken in 7,000 exam centers worldwide – with these figures LPI currently is the fastest growing IT certification in the world. This does not mean that there would not be any challenges around.

To start with, certification costs (100 USD per exam in North America or 125 EUR in the EU) may sound a reasonable price for well-paid Western IT-workers, but the unemployed looking for further qualification won't pay it easily. The problem mounts up in developing countries like China or India, where the exam price easily eats up a month's salary or more. Whilst Microsoft subsidizes MCSE exams in some of these countries, LPI as a non-profit organization can't follow this example.

### Money and politics

The reason for the hefty prices: An LPI exam wouldn't be worth a penny if you had the opportunity to cheat. To guarantee a fair and secure examination, LPI co-operates with Pearson Virtual University Enterprises (VUE) and Thomson Prometric. These US companies operate testing centers at which LPI exams can be taken – using Windows software. Not only are there issues with the money or the testing environment, politics also come into play. Being a Cuban Linuxer, for example, means you do not get the chance to become certified.

LPI is aware of these issues. As LPI president, Evan Leibovitch told Linux Magazine, the organization is currently trying to figure out

how to build a network of exam delivery as a community process. The challenge here is to find exam proctors who can be trusted. To start with, LPI is working towards a co-operation with the academic community. The aim is to beat down the price for an exam to 25 EUR.

### The software side

Meanwhile LPI is working on its own examination software which will not only allow for multiple choice, but also for assimilation testing. This method, known from Red Hat's RCSE, is about embedding hands-on sessions in the exam. The software, internally called "Xamnet", is still in its very early stages.

It will be GPLed and hopefully continue as a community process. The vision is to even implement adaptive testing, a very efficient method that makes it extremely difficult to cheat. This means that the second question presented to a person sitting the exam will depend on his/her answer to the first one, and so on. This way, almost no two exams will be the same, and exam times will be shorter. Statistically, after ten such questions it's clear whether the candidate will fail or not. We don't know yet whether this will ever become a reality, but Evan mentioned that volunteer mathematicians have already offered help.

Reality at present consists of "t7e" (short for "translation"), a Perl/Mason based software developed to keep the 13 language versions of the LPI website *http://www.lpi.org/* in

sync. There are good chances it will be available under the GPL by the time this magazine hits your doormat. The release date should fall together with the presentation of LPI's relaunched website.

### Extending exams

Later this year, LPI hopes to publish the first exam objectives for the third level of certification. It will allow experienced sys admins to specialize, with any two of the third level exam modules getting you a certificate. High-level security and Linux-based computing clusters for enterprises are the first two modules to be completed; if all goes well we'll also see the objectives for a database module towards the end of 2003.

Also an LPI level zero aiming at desktop-users is being discussed. But as the objectives are already a problem – should it cover KDE or GNOME, OpenOffice or Abiword, Mozilla or Konqueror – we won't see further development in this field before the start of 2004.

2003 will however see LPI exams in languages other than English and Japanese. German exams are supposed to be available in time for the LinuxTag conference and fair in July, with Chinese and (Brazilian) Portuguese languages following soon after.

The good news for everyone planning to take an LPI exam this year: The new exam versions, presented at the CeBIT fair (see page 87), take only 90 minutes, forget the old 150 minutes of suffering!