



The TuxHero odyssey continues! This month, we feature TuxHeroes from diverse fields—while two are trying to promote Linux in educational environments, the third has helped a Web solutions company in automating critical services using OSS solutions.

The Linux Chemistry!

Dr Harjinder Singh aka Laltu, professor of chemistry and a well-known Hindi poet, brought Linux to an organisation that had never heard of OSS before. An avid open source fan, he continues to encourage his friends and students to break free!

At Panjab University, computers are used for teaching and research. As a budding computational chemist, Dr Harjinder Singh Laltu had used VMS (Virtual Memory System) as a student in the late seventies and in the early 80s for research and computation purposes. When he joined Panjab University in the 80s, he did not even have access to a computer until rather late. The situation has changed now, and ever since Dr Singh introduced the university to Linux, a lot of machines have been migrated to Linux.

There was simple logic behind the migration from UNIX to Linux—saving money. Additionally, Dr Singh never really had a penchant for Windows, because of the virus menace and other hiccups! He had been using DIGITAL UNIX in 1997, and when Red Hat 6.1 was released, he jumped onto the OSS bandwagon.

Dr Singh has been teaching a course titled 'The Fundamentals and Applications of Computers in Chemistry' for postgraduate students since 1998. In the beginning, most students were inexperienced and were using a keyboard for the first time in their lives. In the first year, they had two leased 486s and nobody had even heard of Linux. But, Dr Singh played a hard taskmaster and made it clear that all the work would have to be done on Linux. In the beginning, they had to occasionally use DOS for some experiments; but from the second year onwards, it was Linux all the way.



Dr HARJINDER SINGH,
professor of chemistry, Panjab University

At the university, Dr Singh was the guiding force behind the migration to Linux. A couple of people in the physics department, especially Vipin Bhatnagar, were also Linux freaks. There were other friends as well, who Dr Singh depended on—Chetan Premani still manages his systems. Although he mostly works using the GUI, Premani is one of the best computer engineers in town, and has formal training from IITK.

The response to the migration from the authorities of the university and the department has been lukewarm. Most of Indian chemistry, especially in the regional universities, is decades behind the world as far as computers go. So, nobody really cares and many of Dr Singh's colleagues are still using Windows.

The highlight of the entire process has been Chetan Premani's success in setting up a Linux-based intranet. Also, the best part about Linux, Dr Singh reckons, is that, because you often have to install things on your own, you tend to make mistakes, and learn a lot about computer architecture in the process. But, over and above everything, he rates

cerebral satisfaction as the greatest outcome of the process. Dr Singh also writes a blog in Hindi using Fedora Core 4 (FC4)—check it out at [http://laltu.blogspot.com].

Dr Singh insists that most of the goals for the migration to Linux have been fulfilled. There are occasional hiccups—like there occasionally are applications that they cannot run on versions of FC more advanced than FC2. The department was earlier using the primitive versions of Red Hat Linux,

which gave them problems once in a while. Dr Singh has found the global Linux community very friendly, and has often got help from many ends. Now, Chetan Premani, the superman, takes care of things for him. To avoid certain problems, Dr Singh advises end users to read the documentation carefully and also read a lot of material from the Net.

Dr Singh is joining a leading IT institute soon, and looks forward to implementing some of his more IT intensive research projects on Linux.

For decision-makers, he has some sincere advice, “Go the Linux way! It is something that organisations the world over, are doing! Why give an already rich Mr Gates more money? Just use Linux!” He also urges the Linux/OSS players of India to be proactive in pressurising the government to ban Windows. “The reasons are many: bad architecture, extra expense. Let us simply throw it away,” he says. “Let’s train the ordinary end user to use more of Linux.” We totally agree!

The Automation Saga

At Olive e-Business Pvt Ltd, automation of Web hosting services was an urgent need. Manoj K. Mishra, Web administrator at the company, decided to rely on OSS rather than spend a fortune on proprietary solutions.

As a Web administrator at Olive e-Business Pvt Ltd, Manoj Kumar Mishra’s prime responsibilities include handling the local network and managing the Web hosting services that the company offers. He was earlier employed with PALCOM, Panipat, where he first learnt about Linux in 1999. Inspired by a colleague at PALCOM’s Delhi office, who earned a handsome salary because he was an OSS expert, Mishra decided to master open source technologies himself. Pinned down by a tight professional schedule, he burnt the midnight oil to quench his thirst to know more about Linux.

Mishra’s career in Linux got a head start when he joined Olive in December 2003. At that time, most of the hosting services at the company were being handled manually. Unable to manage the workload mounting by the day, and realising that clients were using far more Web space than what was their fair share—making the company lose revenue in the long run—Mishra decided enough was enough.

He decided to completely automate the Web hosting services at the

company. Besides the urgent need to automate, there was another menace that was making the company lose on precious man hours—viruses on the Windows platform. On an analysis of the alternatives available, Mishra decided that deploying proprietary solutions was out of the question. He decided to adopt a combination of open source technologies instead—a bold step by any definition.

Earlier, the networks at Olive were

running completely on the Windows platform. Mishra entrusted the entire set up to the Tux’s strong shoulders. Also, manual management of Web hosting services gave way to sophisticated automation through the deployment of the Hsphere control panel on Linux. The adoption of open source technologies helped Olive minimise downtime and optimise the utilisation of critical resources. There were other subtle improvements in



Manoj K. Mishra,
Web administrator,
Olive e-Business Pvt Ltd

productivity, as well. With Linux powering the backbone of the organisation, there were less things to worry about than before, Mishra insists.

For Olive, the highlight of the entire process was having its very own automation system for hosting services. For Mishra, it was a validation of the faith that he had always had in open source software. The top brass of the company were all praise for

Mishra's innovative experiment with OSS.

The entire migration to Linux took a mere three months. For quite some time, the company has been comfortably using the new set up. Although the migration was by and large seamless, Mishra does share a couple of nightmares. He recalls that he had a hard time setting the Linux servers to work with a public IP; and

had to use the Cisco Pix firewall in the No NAT mode to facilitate this.

For Mishra, OSS is more than just his profession. A hardcore Linux fan, he urges the IT players of India to place their bets on this operating system, through which they are bound to win. A man with an open mind, he invites suggestions and ideas at [manoj@oliveglobal.com]. "Linux is here to stay," he says candidly. And Tux smiles!

Remembering Viruses, Now Extinct!

Plagued by the virus menace, IMS Engineering College, Ghaziabad, decided to give Linux a try. Tux and its users have since lived happily ever after!

Barely a few days old at his new workplace, Sandeep Mittal, system administrator at IMS Engineering College, Ghaziabad, had a remarkable task ahead—that of freeing the systems at the institution from viruses. The IT infrastructure at the professional college was considerable. The laboratories were over 350-computers strong, and of these, 65 systems allowed students and faculty members to keep a finger on the pulse of the WWW. Instead of battling it out with resource-intensive and costly anti-virus solutions, Mittal took the road less travelled.

Before Mittal joined the college, the systems had been running on Microsoft Windows. He knew Linux was a robust and virus-free operating system, and a secure one, as well. Plus, most popular Linux distributions came equipped with fine tools that allowed users to surf the Internet, do word processing, create graphics, and more. Mittal expected Linux to provide the hundreds of users at the college a smooth Web browsing experience, and he wasn't disappointed.




SANDEEP MITTAL,
system administrator,
IMS Engineering College,
Ghaziabad

The first step in the crusade was to convince his colleagues that Linux was, indeed, the right choice for the 65-odd systems connected to the Internet. He used the pilot approach—by inviting a couple of his friends to try out Linux on their PCs. They were bowled over by the Tux in two days flat. As the next step, Mittal dug out information on network installation of Linux from every source imaginable—the Net, books, and more. This allowed him to install Linux on all the systems in a really short timeframe. The entire migration was completed in only two weeks.

Although the migration phase was more or less seamless, the real challenge lay ahead. Students had to be introduced to the Linux interface, and taught basics like how floppies should be mounted under Linux or files transferred over the network. Poor support for certain hardware was also posing problems for the admins. Additionally, impatient users seemed to be turned off by the long time that OpenOffice.org took to start up.

One of the highlights of the migration that Mittal is proud of is that everyone at the college can now enjoy

a virus-free Web surfing experience. This has also reduced the network downtime by an eon; and relieved the team of most of the headaches associated with maintaining the network. The authorities of the college are pleased with the way things have shaped up, and are happy that most of their networking problems have simply vanished. Inspired by this success, Mittal is now planning to deploy friendlier flavours of Linux, like Ubuntu and SUSE, in the college. He also has plans to set up a Web server. Suggestions, he says, are welcome at mittalsandy@yahoo.com.

For admins out there, Mittal has a friendly piece of advice, "Try Linux, you'll forget viruses even exist." He urges the OSS players of India to earnestly promote Linux in the true spirit of open source. He has a suggestion for the LFY team, as well, "Engage in ground activities like collaboration with libraries and users." We are all ears, and trying! 

*By: Samartha Vashishtha,
LFY Bureau.*

ERRATA: In the December 2005 TuxHero feature "The main difficulty... solutions," the person in the picture is Abhinab Saikia—lecturer, Dibrugarh University and not as mentioned.