

Bharti Teletech Enterprises Working Easily with Linux

When Bharti Teletech Ltd decided to streamline its business processes, it opted for Linux. The change not only saved costs but was easier to migrate to. The Bharti Group followed up by upgrading its other Microsoft-run systems to Linux as well.

Bharti, like any other business, realised the need to integrate its IT infrastructure. During the course of its IT implementation, Bharti understood that any IT implementation has a short lifecycle because business processes change fast and products get obsolete quickly. The solution needed to handle changing requirements and product obsolescence. This demanded a centralised, manageable system to cater to its offices spread across the country. The system also had to be scalable to be able to handle its existing as well as its future needs.

The initial plan was to develop a system that met the above criteria and handled two business management areas.

- Realtime supply chain management system.
- Realtime customer relationship management system.

THE SOLUTION

It was decided to build a customised package for supply chain management and customer relation management.

It was also decided to opt for Oracle 8i, keeping in mind its features, such as scalability, stability and availability.

The issues considered with the selection of the operating system were:

- Initial cost of the

operating system.

- Cost of the solutions to be used on the preferred operating system.
- Cost of the required hardware platform.
- Recurring costs.
- Availability of additional packages.

Linux was chosen as the operating system because the application software vendor (Oracle) was promoting Linux. In addition, there was the option of using the open source packages on Linux for other purposes as well. Also, there were no additional costs of licensing for the operating system with the expansion of nodes.

The Web-based package was built using WebSphere and Oracle 8i. Different branches connected with the common database and applications in the head office through either ISDN (Integrated Services Digital Network) VPNs (Virtual Private Network) or dialup VPNs.

With this implementation, Bharti centralised its materials procurement, sales and marketing department at its head office in Delhi and was able to manage the entire operations from one location.

In fact, the management was so satisfied with the concept and viability of the open source platform that it decided to scrap the existing messaging infrastructure on Windows, and chose a Linux-based solution instead. Now all e-mail

"Linux is a grand success in our organisation. We have not only deployed conventional services such as corporate messaging, Web proxy, firewall, e-mail and VoIP but also have deployed our major and critical applications on Linux. For example, the Squid proxy with content management has defined our corporate Internet access policies even for remote locations and the VPN."

—Neeraj Arora, network administrator,
Bharti Teletech Limited, Gurgaon



accounts are created on the central server with Web-based access from anywhere in the world.

Bharti chose Q-Mail as the base for a reliable mailing system that has turned out to be nearly perfect and error-free. It is such a rugged system that the company has no need to tweak the server for days.

Next came the Internet access. Earlier everyone had his or her own Internet connection and there was no control on usage.

Then it was decided to implement a Squid proxy on VPN. All the locations used the Internet through a centralised proxy server. The company also

"We implemented supply chain management and customer relationship management on Linux and achieved such a level of reliability, scalability and security of the operating system that we shifted all our existing messaging onto Linux. We got all the required facilities and features while spending less than we would have on other operating systems."

—Gurinder Pal Singh, deputy manager (EDP),
Bharti Teletech Limited

implemented content-filtering on the proxy to avoid unproductive use of the Internet.

To secure all activities, an

About Bharti Teletech

Established in 1985, Bharti Teletech Limited is a part of the Bharti Enterprises Group and has been a pioneer in the telecom sector with many firsts and innovations to its credit. Bharti was the first to launch a mobile phone service in Delhi, the first private basic telephone service provider in the country, the first Indian company to provide comprehensive telecom services outside India in Seychelles and the first private sector service provider to launch national long distance services in India. As of May 31, 2003, Bharti had approximately 3.87 million total customers—nearly 3.47 million mobile and 401,000 fixed line customers.

Bharti Teletech Limited manufactures and exports telephone terminals and cordless phones. Apart from being the largest manufacturer of telephone instruments, it is also the first telecom company to export products to the USA.

Bharti Teletech units are spread across the country—its production units are located at Ludhiana in Punjab, Gurgaon in Haryana and in Goa. In addition, it has units in Hyderabad and Bangalore.

IP Tables-based firewall was implemented. The company also implemented bandwidth management to monitor incoming and outgoing traffic. The hardware uses three online servers to implement the activities and two backup servers.

At present, the Linux servers deployed at Bharti cater to more than 1000 users and more than 10 domains.

BUSINESS BENEFITS

Using Linux-based software for business processes in Bharti has been a huge success. It has provided solutions that cater to their needs, at very low incremental costs. This has been possible because of the

following factors:

- Major savings in server operating system licensing costs.
- No additional licence costs for added nodes.
- Low-cost for remote management of the entire server infrastructure.
- No problems in adding users.
- Very low downtime.
- Centralised control and access.
- 100 per cent return on investment (ROI) within one year; low start-up and ownership costs; increased competitive advantage. **LFY**

The author is director, Tetra Information Services Pvt Ltd, which is engaged in providing enterprise support on Linux. He can be contacted at biswajit@linux4e.com

**Some of you will
spend THOUSANDS
to learn OLD
technologies**



Read LINUX For You

ASIA'S FIRST
LINUX MAGAZINE



**The smarter
ones will grab every
opportunity to
master the future**

For more info, log on to:
www.linuxforu.com

LINUX For You
THE COMPLETE MAGAZINE ON OPEN SOURCE