Case Study – Migrating from Microsoft Windows to Ubuntu

A major Indian courier and logistic company contacted TBS when they heard about official retirement of Windows XP. To save costs and improve security the company was planning to migrate all their systems (approx 400) from Windows XP to Open Source, but lacked the expertise to do so.

The management and the IT team were well aware about the hefty cost involved if they wanted to upgrade their installation-base to a newer version of Microsoft Windows. They decided to move to a Linux operating system in order to reduce these substantial costs and to improve security. However they lacked the in-house expertise to manage a successful migration of more than 400 desktops. TBS supplied expert engineers who worked with them on this project and successfully migrated all the desktops to Linux based operating system named Ubuntu.

TBS performed an analysis and survey on all of the applications running on their desktops and also analysed all the devices attached to the machines. TBS also determined each computer's ability in terms of resources to suggest the best Linux based operating system to be chosen.

TBS were selected as a supplier of the new solution because of our proven pre-existing solutions, our commitment to the open source community and our in-depth knowledge, experience and expertise of the Linux and Linux based operating systems like Ubuntu.

Process

TBS prepared a report based on the analysis about the applications running and devices attached to the local desktops.

Based on the report a dependency list was prepared as to what needs to be installed and configured apart from the basic installation of the operating system. A small set of machines were set-up in the clients organisation for PoC (Proof Of Concept). TBS engineers worked with them together to prepare a usable system for UAT (User Acceptance Testing). The survey and analysis helped in charting out an end-to-end functional workflow to understand how the business operates in terms of operating system use. Each activity in the process was drilled down to mark necessary human tasks and automate all tasks wherever possible.

The project was delivered against very tight time-frames using an on-site/off-site model, where off-site resources were managed directly by on-site team members.

Implementation

Once the UAT was successfully completed TBS moved on the implementation process which involved:

Network Installation
The approach of network installation was adopted to minimize downtime in the organisation. TBS set up a network installer in the organisation and it helped in minimizing the manual effort required during the installation of the Linux based operating system Ubuntu.

Customized disk for Remote Locations
For remote locations where on-site engineers' visits cannot be done, TBS created a final hard drive snapshot so that new hard drive can be cloned using the final copy of the running system. This saved the client a lot of time in the installation process because they do not have to install and configure everything from scratch. Linux operation systems are very flexible in terms of system crash or in case you want to use the same hard drive in another system with different specifications.

Printer add laser/static printer
Client had dot matrix printers which where specifically required for their billing and account related work. TBS worked with their staff in order to understand particular requirement regarding sharing printers so that they can be accessed from every desktop. This was achieved by setting up a print server.

AD Integration
The organisation needed their desktops to be integrated with Microsoft's AD server. TBS with the help of open-source software and some custom written scripts enabled this feature where all the Ubuntu Desktops were able to login with centralized AD server, integrating Linux Desktops with a proprietary (paid) server system.

Custom Software

The listed custom software were installed through the Ubuntu default repository and compiled from source. Some applications were configured to run through wine (an operating system bridge). An open source office suite was installed to replace Microsoft's office suite, further reducing licensing costs for desktop users.

Shared Folder

A network shared device was needed and TBS set up organisation-standard software SAMBA to achieve this. A default icon was place on all of the desktops and upon a single click users were able to access the shared folder. The implementation was both secure and passwordless.

Email Clients

A new email client was configured with their existing email server.

Supplementary OS Training

Supplementary OS training was provided by TBS to the client's IT staff to provide day-to-day support to the end users. This training increased the effectiveness of the IT staff and further reduced costs.

Penetration Test

Once upgrades were completed, a security penetration test was run to ensure the new systems were secure.

Ubuntu Linux Features

- **Improved Interface:** Ubuntu has a rich and improved user interface.
- **Automatic Security updates:** All security updates are automated.
- **Free Applications availability:** A scalable, high performing business analytic reporting engine to cater to all sorts of analytic needs of the business.
- **Notification System:** An inbuilt notification system in case of any upgrade available.
- **Scalable:** Highly scalable system.
- **Multiple File-system support:** Multiple file-system support without installing additional drivers.
- **Multi-users:** Inbuilt multi-users support to enable more than one user to work on the same machine simultaneously.

Achieved Business Goals

- Microsoft Windows License Cost Savings
- Microsoft Office License Cost Savings
- Secure system
- Anti virus License Cost Savings
- Easy Installation
- Performance Increase

WHO WE ARE

Established in 2004 by the Directors of Technology Blueprint Ltd. - a UK-based software services and infrastructure consultancy company - Techblue Software Pvt Ltd (TBS) has a proven track record for delivering quality, innovative and intuitive software, consultancy and support to companies operating throughout the UK, the USA, Europe, the Middle-East, and India. Operating from our premises opposite Cyber City, Gurgaon, India, we specialize in open source technologies, Linux, MySQL, Java, Asterisk/VOIP, Cordova, Liferay, eCommerce and web development. We deliver significant value to our customers by providing cutting edge technology solutions, project management expertise, analysis of projects at business & commercial level and above all a strong code of ethics & an unwavering commitment towards customer excellence.