



CENTRAL BANK OF INDIA

BANK EXPECTS TO SAVE \$1 MILLION OVER TWO YEARS AFTER ADOPTING LINUX AS ITS INFRASTRUCTURE PLATFORM.

Central Bank of India is one of the largest banks in India. Established in 1911, it was the first Indian commercial bank to be wholly owned and managed by Indians. Sir Sorabji Pochkhanawala, founder of the Bank proudly declared on its establishment that Central Bank was the 'property of the nation and the country's asset.' The bank's customer base of 25 million is among the largest in the industry and it has 3115 branches spread across the vast geography of India. Progressive management and far-sighted leadership have ensured that the bank has maintained its status as an asset for the country.

CHALLENGES

CBI's Total Branch Automation (TBA) applications were running on a diverse mix of platforms. The bank had around 13 different TBA software vendors with each vendor's software optimized for a different platform. The banking network was therefore a mix of Windows, Sun Solaris, Novell Netware. Also, multiple solutions from various vendors meant a lot of effort on training the staff and frequent job transfers added to the challenge of training the employees.

With 3115 branches and 286 extension counters across India, scaling up its heterogeneous network was a major challenge for the bank. Changes in banking regulations also mandated that banks had to achieve total computerization by December 2004. In the year 2000, CBI therefore decided to look at revamping its computing infrastructure. For CBI, scalability, ease of support and maintenance was a key requirement in selecting the operating system platform. The bank has a far-flung network

that reaches remote parts of India; one of the bank's branches is located 12,000 feet above sea level. In case of a system failure, getting support to these locations would be difficult. Therefore, CBI wanted a system that was robust, relatively immune to viruses and could be supported and maintained easily even in remote locations. This would allow the bank to minimize downtime and deliver a consistently high level of customer service throughout its network.

Being a bank, reliability and security were both high on the priority list. On the LAN based solution that the bank was using earlier, reliability was a problem. Virus attacks would bring the whole network down and CBI did not have the expertise to resolve these problems at the grassroots level. Network downtime, system crashes etc were problem areas because they brought business to a standstill and adversely affected customer satisfaction.

SOLUTION

Though Linux was relatively new as an enterprise operating system in 2000, the momentum behind the platform convinced CBI that it should go with Linux. The support provided by Red Hat and by IT giants like IBM and Oracle added to the crucial peace-of-mind factor and made the choice easier.

The bank narrowed down its list of TBA vendors to two. Also, these vendors were willing to port their applications to Linux. TBA applications on the Cobol/Btrieve/Novell Netware platform were migrated to the more robust Red Hat and Oracle combination.



CBI's pilot tests of the Red Hat and Oracle combination went off so smoothly that its employees were not even aware of the migration from the legacy Cobol/Btrieve/Novell Netware environment.

"That was a turning point and we decided to carry the migration to Red Hat Linux forward. Normally, there is resistance to change but in this case, people were not even aware anything had changed. The migration to Red Hat Linux has been so successful that we have now rolled it out over 1,115 branches," says Raghuraman.

Most of CBI's 25 million customers are now served by the bank's implementation of Linux that supports critical banking processes including inter-branch reconciliation, accounts and balance sheet dealing, credit disbursement, telebanking and cheque collection.

BENEFITS

K Raghuraman, GM, IT, Central Bank of India, estimates that by standardizing on Red Hat in the branches across the Bank, CBI will generate savings of about \$1 million over a two year period by way of License fees, Training and Maintenance cost.

Many of the bank's branches are being computerized for the first time and therefore ease-of-maintenance is extremely important. The bank found that Linux fits the bill because its stability eliminates the need for heavy-duty support. The bank cannot afford to have its computers crash or hang especially when customers transactions are being executed.

"In a nutshell, the advantage of using Red Hat is that it is hassle free. In the cities, maintenance and support is not such a challenge because you can always find people to rush to the location and resolve the problem; you can't do that in a remote branch that's 12,000 feet above sea level. We have proved to the world that Linux works in a decentralized and geographically dispersed network like ours.

"Red Hat's OS requires very little maintenance and that's a boon for a bank like ours that has many far-flung locations. The system runs smoothly; it does not have the virus issues that plague other platforms and we haven't had problems with scalability or corruption of data. Our Linux

systems have been trouble-free since we started deployment," says Raghuraman. By using a more robust and secure system that's less prone to virus attacks and system crashes, the bank has increased customer satisfaction levels at the branches.

Raghuraman feels that, in today's competitive world, Linux helps CIOs by helping them cut costs without compromising on security and sustainability.

"When we started deploying Linux, other banks asked us, "Are you sure you want to go with Linux? However, the fact that companies like IBM, Oracle and Red Hat were supporting Linux was a comfort to us. There is a lot of funds flowing into this area, support is easily available, there is plenty of research happening on Linux and its long-term sustainability is not in doubt. The choice was therefore very clear," says Raghuraman.

At CBI, typically, the Linux-based systems are rebooted only once a year ensuring trouble-free maintenance for the bank. The bank has initiated an internal training effort program that covers 400 employees with some level of computer literacy. These staff members will be posted in key locations across the country to manage the IT infrastructure. Raghuraman feels that in today's competitive environment, companies have to keep a tight leash on costs and Linux has helped the bank in this regard.

CONCLUSION

CBI has been a pioneer in the usage of IT and recently moved its entire computing infrastructure to Red Hat. CBI has executed successfully on a formidable challenge. By migrating to a completely new operating system, database and TBA application across 1,115 branches, the bank has conclusively proved that Linux is ready for enterprise desktops and servers even in a decentralized environment. In fact, CBI has made it mandatory that going forward all its applications should be on the Linux platform. The bank now plans to deploy Red Hat Enterprise Linux across all the remaining branches too. The bank also plans to deploy Linux across 23 Regional Rural Banks that it controls. These banks consist of 1,770 branches and over 5,000 computers. The cost savings expected through the deployment of Linux is therefore substantial.



Beyond cost savings, the bank also aims to empower its people through technology. "We want to deploy this technology even in remote branches and free our people from repetitive tasks so that they can focus on customer service and other activities that help grow the bank," says Raghuraman.

FOR CBI, ITS BOLD BET ON LINUX HAS PAID OFF HANDSOMELY AND THE BANK'S IT INFRASTRUCTURE HAS BECOME A ROLE MODEL FOR BANKS AND ENTERPRISES TO EMULATE.



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