



Case Study

Lotus Domino/Notes upgrade

Customer	Ngee Ann Polytechnic – One of Singapore’s leading institutions of higher learning. Its eight academic schools offer more than 30 full-time diploma courses.
Project Phase 1	Lotus Domino/Notes upgrade Upgrade servers from Lotus Domino 5.x to 6.54
Duration	Two months
Project Phase 2	Lotus Notes upgrade Upgrade campus-wide Lotus Notes clients from R5 to R6
Duration	Three months

BT Frontline Technologies Pte Ltd successfully designed and implemented the Domino upgrade plan for Ngee Ann Polytechnic to meet the customer’s business objective.

This was achieved through BT Frontline’s process-driven implementation methodology and the technologies from Sun, IBM Lotus Domino Groupware, StorageTek and IBM Lotus Domino Clustering.

The project team was able to meet the tight deadline set.

Key Business Objectives and Challenges

- To reduce downtime for staff (up to 1,600) and students (over 10,000 mailboxes) while upgrading the various Domino infrastructure servers
- To optimise the e-mail infrastructure by relocating key Staff e-mail servers from Wintel to Sun platform
- To enhance the student webmail functionality by deploying Domino iNotes.

Products and Services

- IBM Lotus Domino/ Notes 6.54
- Sun Fire v880 and Sun Fire v280 servers
- Veritas Volume Manager v3.5
- Frontline Technologies’ project management and professional services.

Key Business Solutions

- IBM Lotus Domino/Notes 6.54
- Sun servers solution which provides the RAS (Reliability, Availability and Serviceability) capabilities
- StorageTek SAN storage with Veritas Volume Manager
- IBM Lotus Domino clustering technology for high availability of the Domino services.

Duration

- Two months for studying the existing infrastructure, preparing and executing the upgrade plan which includes upgrading OS (Solaris 8 to 9) for multiple servers, upgrading Domino (5.x to 6.54) for more than 20 servers, migrating the Staff servers from Wintel to Sun platform and deploying new features.



Methodology

- A 3-phase approach was developed to upgrade servers in all 3 domains with minimum disruption to staff, students and other departments. STAFF domain servers were upgraded first, followed by that of STUDENT and ADMIN.
- A pilot phase was conducted with a few test servers running Domino 6.54 and a small group of users to test all functionality aspects of the new version. The rest of the servers were upgraded in the subsequent phases.
- Minimum, if not zero downtime for the users was achieved by using the Domino clustering features when upgrading the servers.
- In each domain, its Administration server was upgraded first, followed by its Mail and Application servers. This approach is a standard recommended by IBM for Domino infrastructure upgrades.
- During each server upgrade and migration, Domino maintenance tasks (fixup, compact, updall) were run on all system databases and user mailboxes to ensure the design was properly upgraded to the new version of templates, as well as for database consistency.
- For the Lotus Notes client upgrades, a 5-phase approach was adopted in order to make the rollout more manageable and systematic. There were 2 pilot phases followed by 3 mass rollouts that covered almost 1,600 clients.
- The rollout was carefully planned around the constraints of users' availability and geographical location to maximise productivity as well as minimise waiting time for the users.
- Using all the above strategies, the project was delivered very smoothly and efficiently to the satisfaction of the customer.

Customer's Feedback

- "NP is glad that the project was systematically carried out and completed according to schedule.....BT Frontline team has no problem working well with NP." - *Angela Wong, NP Project Manager*
- "BT Frontline's lead consultant (Rahman) is dedicated in his work." - *Tay Shu Ming, NP Project Manager*