Migrating Lotus Notes Applications to SharePoint
Introduction

In the early stages of computing with centralized operations, there was no real need to share data across systems. However, the emergence of personal computers and smart terminals created information islands raising the need to collaborate and share information across computers. Lotus Notes seemed to be a panacea for all the needs and offered a solution for collaboration, information sharing, information management and related functions. It soon became an integral part of the IT portfolio for most organizations due to its ability to replicate, provide offline content and data security, its ability to provide a huge database and web server directory services, and its ability to develop applications rapidly.

Over the years, as technology became increasingly ubiquitous, and new needs and ways for data sharing were discovered, new players entered the fray. Each of these platforms had its philosophy and tried to fulfill user needs in a specific way. As features evolved and became sophisticated, platforms matured and metamorphosed into specialized platforms for messaging, document management, content management, portals and collaboration management.

While businesses were moving into an era of highly scalable architecture, web services and Service-Oriented Architecture (SOA), rich customer-facing applications, and mobile workforces; most of the available platforms did not provide rich capabilities and flexibility. Though Lotus Notes evolved with time, adding features such as web support, instant messaging, presence awareness, blog, wiki, RSS support etc., other products caught up and offered better cost-feature benefits. For this reason, many companies striving to be more efficient, more competitive and more cost-effective evaluated other collaboration products and in many cases decided to switch to competitive product mix such as Microsoft Exchange and SharePoint.

Microsoft’s SharePoint platform underscores this growing desire to invest in the advanced technology. It is the one of the platforms where a variety of information can be consolidated and managed. SharePoint provides enterprise-ready and integrated server capabilities. In the last few years, it has emerged as a strategic platform for organizations worldwide. Starting from SharePoint 2003, Microsoft Office SharePoint Server (MOSS) 2007, Windows SharePoint Services (WSS) 3.0 to SharePoint 2010 & 2013 and to Microsoft’s SharePoint Offering in Cloud-Office 365, there are many versions of SharePoint that can serve varied needs of users and organizations.

The purpose of this white paper is to describe the migration strategy and the tools use for migrating applications from Lotus Notes platform to SharePoint. Although, Lotus Notes migration would typically also involve migrating mailboxes to a mail server such as Microsoft Exchange; however, discussions on migrating mailboxes is not within scope of this white paper.

Migration Methodology

NIIT Technologies’ migration methodology enables companies to define the right-fit components and architecture. This methodology helps in migrating entire portfolio of Lotus Notes technology and applications to the Microsoft platform with minimal business disruption.
Prelim Analysis
The first phase of the migration project involves understanding the current environment. Prelim analysis is performed on the enterprise network with the help of tools to generate an inventory of existing Lotus Notes infrastructure (servers, workstations etc.) and applications that exist in the enterprise. The tools are also involved in the cleanup job to identify similar databases, system databases, databases that are not used for a long time, etc. It helps in reducing the inventory size.

Tools running on this list analyze each application. Based on the tool based analysis, various reports are generated related to the size of the application, its usage statistics and structure (whether developed on a standard template or customized template; does it have web forms or whether it uses workflow etc.). The applications categorized based on these attributes provide suggestions on target platform. The outcome of this phase is reports that are vital inputs for the next phase.

Analysis
Analysis phase involves filtering of the application list generated in the prelim analysis phase. Applications are categorized into various groups (e.g. developed on standard templates, workflow similarity, ability to access Web, usage statistics, application complexity etc.). Analysts discuss this data with business users and decide to either archive, delete or migrate (with or without functional changes) each of these applications.

Migration Understanding and Setup
This phase consists of understanding the application inventory. A quick round of discussion with IT and business users helps make required changes to the migration set. Business dependencies, dependencies with respect to other systems (mails migration, user migration to AD etc.) and applications are identified in this phase. This helps develop the dependency matrix and migration schedule. In this phase, migration development and testing environment are set up with a basic understanding of the production environment.

Pilot Migration
This phase acts as a proof of the migration plan. A small representative set of applications is taken up for migration. As these applications are migrated, rough edges in the plan are identified and corrective actions are taken.
Individual App Migration

This phase involves actual migration, testing and acceptance of applications. It is suggested to execute this phase in iterations. Migration strategy for each application under migration is decided based upon the analysis result and could involve diverse strategies such as automated migration, migration to SharePoint, custom development and so on. Applications migrated in each iteration are picked based on a specific criteria, and subjected to Quality Assurance (QA) and User Acceptance Testing (UAT). After this, business can decide to move the migrated applications to the next phase.

Coexistence

This phase involves parallel run of Lotus Notes and migrated applications. Companies should take special care to ensure that the same set of users is not working on both the versions. This can lead to data conflict. The purpose of a parallel run is to ensure that an alternative environment is available for business urgencies, in case of unforeseen hiccups. Parallel run also helps in migrating users to the new environment in a phased manner.

In case there is a business need to let users work on any of the environments irrespective of the systems used by the user, data must be available on both the systems. Data bridging and sync mechanisms should also be put in place. There are various tools available in the market that can be used for this purpose.

Go-Live

Go-Live signifies full production run of the new SharePoint application set and decommissioning of Lotus Notes applications.

Tools Available for Migration

There are a number of tools available today that boost no loss during migration from Lotus Notes application to SharePoint. In our endeavor to find the most efficient tools, NIIT Technologies has studied and worked on CASAHL DART product suite, DELL Migrator for Notes to SharePoint and VisiMigrate from Visionet.

CASAHL DART Product suite

CASAHL DART product suite provides support for the complete lifecycle for migrating and integrating collaborative applications with enterprise data systems. DART lifecycle is depicted below.

- Discovery: Crawler helps collect raw data from the current IT footprint.
- Analysis: Analyzer is used to analyze the raw data and create a detailed report of the current deployment, including usage patterns and content characteristics.
- Rationalization: CASAHL Lifecycle Dashboard helps in planning by bringing together all the inputs from the Discovery and Analysis phases so transition managers can make the right decisions for the business.
- Transition: ecKnowledge helps implement transition and migration. ecKnowledge can also integrate collaboration/content systems with other enterprise resources, including database management systems and enterprise applications.

While DART product suite helps plan, migrate and integrate Notes application to SharePoint/.Net, it can be used with tools available from Microsoft for migrating mailboxes and effect integration with Notes and AD to provide complete support for migrating from Lotus Notes to Microsoft Exchange and SharePoint.
DELL Migrator for Notes to SharePoint

Migrator for Notes to SharePoint migrates Lotus Notes, QuickPlace/Quickr and Domino.Doc applications to SharePoint 2010/2013, Office 365 and other hosted SharePoint environments. The tool also generates InfoPath documents and performs a number of other useful functions during migration. With an intuitive user interface and easy-to-follow Notes data mapping to SharePoint list, Notes Migrator can be operated by both technical and non-technical users.

Migrator for Notes to SharePoint can be combined with other tools available from DELL to help migrate mailboxes to Microsoft Exchange and also aid SharePoint Governance, thus ensuring end-to-end support for migration, integration and ongoing management of SharePoint Infrastructure.

VisiMigrate from Visionet

By using VisiMigrate, organizations can convert application data before transferring it to SharePoint. The system allows mapping of a single Lotus view to multiple SharePoint lists and vice versa. Multi-threaded application implementation dramatically reduces migration process time as compared to other data migration tools.
VisiMigrate enables organizations to move content from Lotus Notes database files to mapped elements in SharePoint 2010. Information can be transferred as-is or can be converted according to the business requirements using built-in expressions of VisiMigrate. It assures users that no data will be lost during transfer reducing the deployment time of SharePoint application and making it cost effective.

Comparative Analysis
All these tool suites provide varied support for migration, integration and governance activities and thus choice of the toolset depends upon the migration needs. Following table provides a comparative analysis of their capabilities and suitability:

<table>
<thead>
<tr>
<th>Capability</th>
<th>DART Product Suite</th>
<th>Migrator for Notes to SharePoint</th>
<th>VisiMigrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for Lotus Notes application migration to SharePoint</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Good (support not available for SharePoint 2013)</td>
</tr>
<tr>
<td>Support for Pre-analysis and analysis</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Basic support</td>
</tr>
<tr>
<td>Support for complete migration lifecycle</td>
<td>Excellent</td>
<td>Good</td>
<td>Basic</td>
</tr>
<tr>
<td>LotusNotes, SharePoint, Exchange integration capabilities</td>
<td>Good</td>
<td>Excellent</td>
<td>Not available</td>
</tr>
<tr>
<td>Two way data sync</td>
<td>Yes</td>
<td>Yes</td>
<td>Not available</td>
</tr>
<tr>
<td>Support for migration to exchange</td>
<td>Need to use Microsoft tools</td>
<td>Other tools available from DELL can be used</td>
<td>Not available</td>
</tr>
<tr>
<td>SharePoint Governance Support</td>
<td>Basic</td>
<td>Other tools available from DELL can be used to provide good support</td>
<td>Basic support is available</td>
</tr>
</tbody>
</table>

Conclusion
Consolidating data for every project on SharePoint seem to be an insurmountable challenge. However, reduction in resource management and increase in productivity make it a worthwhile effort. Planning and following best practices will help organizations consolidate their project, ensuring success. Choosing a toolset that supports the migration effort seamlessly goes a long way in ensuring success of the migration effort.
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