novaMigrate™ Server-Side

novaMigrate™ Server-Side is a tool that enables organizations to migrate their Lotus Notes email, calendar, and contact data to Google Apps. It is unparalleled in its data fidelity and migration speeds. Our unique architecture allows for a Lotus Notes-based tool that can be easily run and administered by your existing Lotus Notes Administrators, but is fully multi-threaded, and can simultaneously push up data for hundreds of users on the same server.

Some of novaMigrate™ Server-Side tool's key features include:

Mail Migration

- Full OAuth 2.0 support for increased security
- Leverages IMAP
- Full multi-domain support
- Fully multi-threaded; able to push mail to Google for hundreds of users at the same time on the same server
- Migrates all mail including attachments
- Converts folders to Google Apps labels
- Preserves unread and read marks in messages
- Converts all Notes email addresses to SMTP addresses
- Supports date range migration
- Maintains Notes document links
- Migrates Sametime chat logs
- Option to exclude folders
- Option to exclude messages containing specific fields
- Comprehensive support of full migrations, delta migrations and date range migrations
- Option to send "Migration Complete" email to end users, providing full migration statistics along with a direct Notes link back to any items which failed to migrate

Calendar Migration

- Full OAuth 2.0 support for increased security
- Full multi-domain support
- Fully multi-threaded; able to push calendar data to Google for hundreds of users at the same time on the same server
- Migrates calendar data for specific date ranges
- Full batch support for faster migration times
- Converts all time and date settings to Coordinated Universal Time (UTC), thereby eliminating time-zone issues
- Supports all Notes Calendar entry types including Meeting, Appointment, All Day Event, Anniversary, and Reminders
- Supports repeating calendar entries as recurring events
- Maintains attendee status
- Converts all Notes names/addresses to SMTP addresses
- Maintains privacy flags
- Option to "fan out" or not
- Calendar attachments are migrated to Google Drive
- Option to send "Migration Complete" email to end users, providing full migration statistics along with a direct Notes link back to any items which failed to migrate

TEMPUSNOVA

Calendar Migration to PDF

- Migrates calendar data for specific date range to a single PDF document
- Supports all Notes Calendar entry types including Meeting, Appointment, All Day Event, Anniversary, and Reminders
- Option to send "Migration Complete" email to end users, providing full migration statistics and a copy of the PDF file

Contacts and Personal Groups Migration

- Full OAuth 2.0 support for increased security
- Full batch support for faster migration times
- Fully multi-threaded; able to push contact data to Google for hundreds of users at the same time on the same server
- Full multi-domain support
- Migrates contacts from the users' Notes' mail file
- Converts all Notes email addresses to SMTP addresses
- Option to Migrate Contacts and/or Personal Groups
- All fields are migrated from Notes contact records to Google
- Option to send "Migration Complete" email to end users, providing full migration statistics along with a direct Notes link back to any items which failed to migrate
- Contact file attachments (Briefcase) are migrated to Google Drive

Mail-In and Discussion Database Migration to Google Groups

- Full OAuth 2.0 support for increased security
- Leverages IMAP
- Full multi-domain support
- Fully multi-threaded; able to push mail to Google for hundreds of users at the same time on the same server
- Migrates all mail including attachments
- Preserves unread and read marks in messages
- Converts all Notes email addresses to SMTP addresses
- Supports date range migration
- Maintains Notes document links
- Migrates Sametime chat logs
- Option to exclude folders
- Option to exclude messages containing specific fields
- Comprehensive support of full migrations, delta migrations and date range migrations
- Option to send "Migration Complete" email to end users, providing full migration statistics along with a direct Notes link back to any items which failed to migrate

Migrate Lotus Document Libraries, Team Rooms & Custom Notes Applications to Google Drive

- Full OAuth 2.0 support for increased security
- Full Multi-domain support
- Fully multi threaded -- enables the simultaneous migration of hundreds of libraries on the same server
- Converts all Notes email addresses associated with a Document Library document to SMTP addresses
- Provides an option to send a "Drive Migration Complete" email to Doc Lib Owners, including a full migration statistics report along with a direct Notes link back to any items which failed to migrate

- No design changes made to Notes document library files
- No duplication of documents or files occurs if the same library is migrated multiple times
- Admins can choose
  - whether to convert non native file types to Google Doc file types
  - to select Notes fields to use as meta data in migrated Drive files
  - to skip docs larger than X
  - to skip docs that contains certain fields
- Full migrations, date range migrations, delta migrations accommodated
- Migrate your Groups and Group members to Google prior to running Drive migrations if possible. ACL's of Drive documents are created using the following:
  - Use Notes ACL for the Drive ACL if document is NOT listed as Private
    IMPORTANT: Because the system reads Doc Lib/Team Room database Access Control Lists, the system/migration server must have at least "Designer" access to the files to be migrated
  - Use Readers/Authors field for Drive ACL if document is listed as Private
- Create a Google user account that will act as the "Owner" of all Drive documents migrated
  - Account does not need have to have admin privileges -- feel free to create a Google user account for each Document library or a single Google user account
  - Ensure the user account(s) has additional space purchased over and above the free 30GB limit
  - Purchased limit should be well above what would be needed to house all files from migrated Document Libraries
- Determine a top level folder name for each Document Library in need of migration and be sure to strongly suggest a unique name
- System loops through all documents in a document library, creates folders for each category and each subject, and migrates the attachments in the document to Google Drive in the folders created from its category/subject
  - ACLs of Drive docs are set either from document library's ACL or, if the document is Private, readers/authors fields are used for the Drive ACL
- All folders and Drive documents migrated are under a Top Level Drive folder that is listed in the migration document

Technical Description

novaMigrate™ Server-Side is a native Lotus Notes application with a Python backend. It is composed of an application profile document; control documents for users, mail-in databases, and resources; and several scheduled agents.

The Lotus Notes administrator can configure the general settings of the tool in the application profile document. These settings include the application license key, the Lotus Notes environment parameters, the Google login parameters, and logging parameters. The administrator can also configure detailed settings for each of the following:

- User mail migrations
- User calendar to Google migrations
- User calendar to PDF migrations
- User personal contact and personal group migrations

- Mail-in and discussion database migrations to Google Groups
- Document libraries, team rooms and custom app migrations to Google Drive

After configuring the tool, the administrator may choose to create migration documents by importing user and mail-in data from a Domino Directory or from a CSV file. Migration documents contain data regarding the matching user or mail-in database, such as Google Apps and Notes email addresses, and allows the administrator to change the mail file path and server path for particular users or mail-in databases. Each migration document inherits values from the application profile, however, novaMigrate™ allows the administrator to override these settings for a particular migration document.

After reviewing the migration documents, the administrator may start the migration process for selected migration documents. The administrator may choose to do a full mail migration, a date range mail migration, a delta mail migration, a calendar to Google migration, a calendar to PDF migration, a contacts only migration, or a contacts and groups migration.

A scheduled agent will start the Python backend, which will perform the migration process.

Prerequisites

1. The novaMigrate™ Server-Side database must reside on a dedicated server with a minimum of 6GB RAM and 300GB of disk space (8GB RAM, 500GB of disk space, and dual processor recommended). Will work on a virtual machine.
2. The novaMigrate™ Server-Side database must reside on a Windows Server 2008 (64 bit only) or greater server.
3. The novaMigrate™ Server-Side database must reside on an IBM Domino Server version 6.5 (32 bit only) or greater.
4. The Domino Server must have access to run scheduled agents, and must have the SMTP server task enabled.
5. The Domino Server must have access to all mail servers. You may have to add the novaMigrate™ Server-Side server to the *Trusted Servers* field of the server documents all mail servers.
6. Any anti-virus software on the novaMigrate™ Server-Side server must not scan the *z_novaMigrate[x]* folders under the Domino data directory.
7. The novaMigrate™ Server-Side database must not maintain unread marks, and must not have a full text index.
8. The server time must be **extremely** accurate. The server must be synced to an NTP server that is close to the migration server.
9. Both the daytime and nighttime *Max LotusScript/Java execution time* fields in the Agent Manager tab under the *Server Tasks...* tab of the Server Document must be set to at least 1,440 minutes.
10. Both the daytime and nighttime *Max concurrent agents* fields in the Agent Manager tab under the *Server Tasks...* tab of the Server Document must be set to 10.
11. Both the daytime and nighttime *Max % busy before delay* fields in the Agent Manager tab under the *Server Tasks...* tab of the Server Document must be set to 90.
12. Along with standard Lotus ports, Ports 80 (HTTP), 443 (HTTPS), 993 (Secure IMAP), 25 (SMTP) Outbound should be open on the migration server.