G Suite Migration for IBM Notes

Installation & Administration Guide

Google

Contents

Introduction

About this guide

This guide is provided to help you understand and use G Suite Migration for IBM® Notes® (GSMIN).

(This tool was formerly known as Google Apps Migration for IBM® Notes® and Google Apps Migration for Lotus Notes™.)

What's in this guide

This guide contains the following information:

- An overview of GSMIN features and functionality
- An explanation of GSMIN architecture and how information is migrated
- Instructions for installing and configuring GSMIN
- Troubleshooting tips

Who should use this guide

This guide is intended for administrators who are responsible for the installation and management of GSMIN. A thorough understanding of IBM® Notes® (formerly Lotus Notes™) administration is required.

Where to find the latest version of this guide

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https://support.google.com/a/answer/154630

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Thanks!

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Overview

G Suite Migration for IBM® Notes® (GSMIN) is a native IBM Notes (formerly Lotus Notes™) application that lets you migrate Notes users and Mail-In databases to G Suite. Migration includes mail, calendars, personal contacts, and groups. You can also migrate data from an IBM Notes discussion database or document library to a Google Group. You install GSMIN on an IBM Domino® server running Microsoft® Windows®.

The following sections outline the general features of GSMIN, as well as functionality specific to each type of content that you can migrate.

General features

GSMIN provides the following general features to help simplify your G Suite Migration:

- **Unattended migration.** Information is migrated to G Suite by a set of scheduled agents that run in the Migration Administration and Feeder databases.

- **Multiple methods of registration.** You can register users/databases one at a time, by server, via the Domino Directory, or by file import.

- **Provisioning.** You can optionally provision G Suite accounts, mailing lists, and resources.

- **Incremental updates.** Users can continue to work with their Notes mail during migration.

- **Event and exception logging for each user/database.**

- **Invitations and notifications.**

Mail migration

GSMIN preserves your IBM Notes mail throughout your migration, with support for attachments and links to Notes documents, views, and databases.

The following Notes mail features are converted to corresponding Gmail features automatically:

- Notes mail addresses are converted to Gmail addresses.

- Notes mail folders are mapped to labels in Gmail.

- The yellow Gmail star is applied to mail that has a Notes follow-up flag.

Additionally, the following GSMIN features help you fine-tune and monitor your mail migration:

- A folder-inclusion or folder-exclusion list lets you manage which mail is migrated for each user.

- During migration, messages, contacts, and calendar entries are marked with update status.

- GSMIN logs the number of messages transferred and the total size of the mail transfer for each user.

Notes:

- Unread marks are not migrated to G Suite. All mail is migrated as read.

- Label creation can fail for a folder if the user has changed the folder type to **Shared, Private on First Use**. This folder type may cause an internal "Notes 4005" error when accessed by the migration agents.

Calendar migration

GSMIN supports all of the following calendar features:

- Meetings

- Appointments

- All-day events

- Anniversaries

- Reminders

- Imported Holidays (from the Domino directory)

- Alarm and privacy settings

Notes:

- Calendar attachments are not migrated.

- Delegated attendees are not supported.

- Custom events, events that have a weekend rule applied and imported holidays where the holiday date differs from one year to the next are not migrated as repeating events. Each instance from these event types is migrated as a separate single instance event.

- GSMIN also supports room and resource information in your Notes calendar events; however, it is important that you load this information into GSMIN *before* you start to migrate your users' calendars. See Provisioning resources for more details.

- The system only supports events that are added to a Notes calendar through a supported Notes or Web client. Migration of events that have been created by third-party software, including custom Notes applications, is not supported.

- Resource bookings are only supported where the user has booked the resource from their own Notes calendar. Bookings added directly into the Domino Resource Reservations database are not migrated.

Contacts and Group migration

The same agents that migrate mail and calendar data also migrate each user's contacts, including any personal contact groups stored in the personal address book.

Roaming users are supported. During user registration, the system detects whether the user is a roaming user. For roaming users the system migrates the contacts and groups from the personal address book on the roaming server specified in the user's Person document. The system cannot access a local address book so non-roaming users must synchronize their local address book with their mail database prior to contacts migration.

G Suite doesn't support nested contact groups. GSMIN will migrate nested contact groups as Google contacts. To avoid this, users should flatten their group contact membership before beginning migration.

Notes database migration

GSMIN supports the migration of specific Notes database types. Discussion databases and document libraries can be migrated to Google Groups, which is similar to the IBM Notes discussion application. Mail-In databases can be migrated to Google Groups or to a standard G Suite account.

Note: Although it is possible to migrate Microsoft Office and SmartSuite databases to a Google Group, OLE objects don't render correctly following migration, so there is little value in migrating a Notes OLE database.

Email format handling

The system attempts to convert Notes email addresses to SMTP addresses at run time using information that is held in the Domino directory Person documents.

GSMIN removes display names (the phrase part) from all SMTP addresses because these can become corrupt during processing. Specifically, the phrase part can result in lost or corrupt characters which can in turn lead to the content being rejected by Google's servers. As an example, the address "John Smith" <jsmith@example.com> is modified and migrated as jsmith@example.com.

Migration transport mechanism

Notes content is not mailed to Google servers. All content is packaged and posted to Google via HTTPS.

It is important all servers running GSMIN have direct Internet access so they can post content to the Google migration servers. You should work with your own network team to ensure there are no restrictions preventing access to the Google servers from the migration servers.

Parallel processing

Each migration server can process 10 users/databases concurrently. Migration performance depends on a number of factors. For example, the system migrates a maximum of one message per user/database per second, so:

- 1 server processing 10 users = max 10 messages processed per second. If each of those 10 users has 4,000 messages, the system could migrate those messages in 4,000 seconds, or 1.11 hours (10 users * 4,000 messages = 40,000 messages; 40,000 / 10 messages per second = 4,000 seconds or 1.11 hours). The estimate here does not include the preparation time where each Notes message must be converted to MIME before it can be migrated. In practice you should double the migration estimate to allow for the preparation phase, so in this example, the 10 users could be completed in approximately 2.22 hours.

Performance may be limited further by a number of other factors including:

- Message size

- Physical resources on the migration server like CPU, memory, disk speed, and network connection speed

- Physical resources on the mail server like CPU, memory, disk speed, and network connection speed

- The overall speed of your network and your connection to external networks

- The density of traffic outside your network

- Chosen migration server topology and location or mail files in relation to the migration server

Additional resources

For additional resources and information to assist with your migration, go to the help at:

Migration from IBM Notes

(https://support.google.com/a/topic/25364)

Architecture and deployment options

Architecture

This section covers the primary architectural components of G Suite Migration for IBM® Notes® (GSMIN) and the hierarchy used to implement and manage data migration from IBM Notes (formerly Lotus Notes™) to your G Suite domain.

Components

GSMIN comprises the following primary components. These components taken together are referred to as the **migration server**.

- **The Administration database.** This native Notes database (*Migration Administration*) contains GSMIN configuration details.

- **Feeder databases.** These databases are the staging areas where mail being migrated to a Google account and documents destined for a Google Group are converted to MIME and then transformed to the format required by Google APIs. Feeder databases also manage the migration of calendar and contact information. A Feeder database processes one user at a time. When you implement multiple Feeder databases, the databases work simultaneously. For example, if you implement 10 Feeder databases, then you can process 10 users at one time.

- **Log databases.** Each migration server has at least one log database. Tasks performed in the Migration Administration database, such as user registration, are logged to this database. Optionally, the server can also host a log database for each Feeder that logs migration events for each user. Log entries are purged after 7 days.

- **Administration Database agents.**

  - *Check Feeders* runs in the Administration database. This agent creates the Feeder databases, and also creates a Mail-in database document in your Domino directory for each Feeder database. If you delete a Feeder database or Mail-in database document, this agent recreates them. This agent runs every 60 minutes by default.

  - *Purge Documents* runs in the Administration database. This agent removes any temporary documents that are created by other processes in the Administration database. This agent runs daily.

- **Feeder Database Agents.**

  - *Migrate* runs in each Feeder database to carry out the data migration for each user or database that has been registered and activated in the Administration database. This agent runs every 15 minutes.

The following diagram illustrates how the components work together.
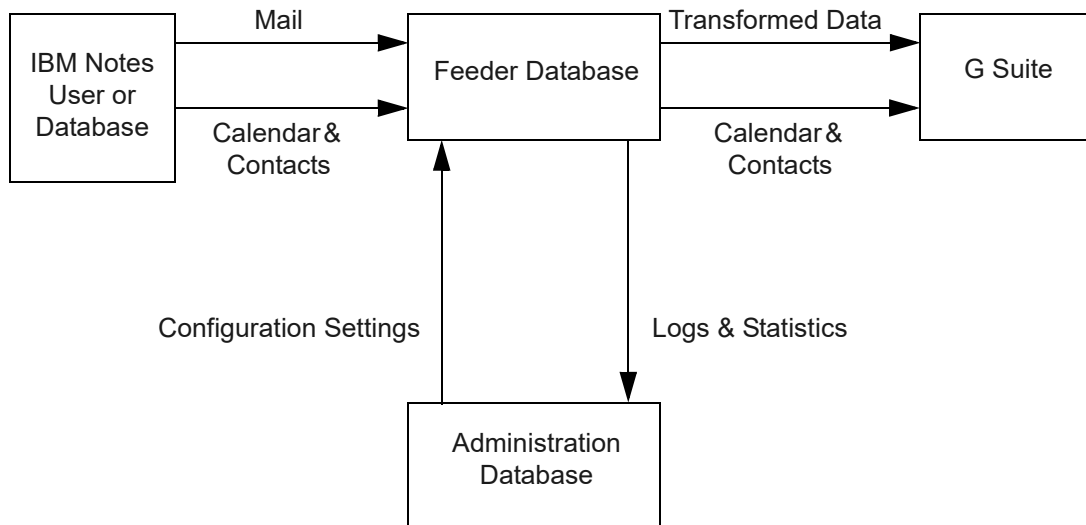
During migration, a crawler in the Feeder database scans each mail file / database to extract the content to be migrated. Mail being migrated to a Google account and content destined for a Google Group are stored temporarily in the Feeder and transformed to XML/JSON before being posted to the Google servers. Contact and calendar details are delivered directly to G Suite.

The system creates migration status views in each mail file / database so users can monitor the migration process.

Migration management settings

GSMIN uses the following forms to manage the migration of Notes data to G Suite.

System setup form

The system setup form defines your migration server settings, which include:

- General settings such as

  - Migration status
  - Administrators
  - Domino directory file name
  - Server time zone
  - Migration start date

- G Suite domain details

- Default settings for each newly registered user/database

- Network connection information

The system setup form must be completed when you first install the system.

For more information on global settings, see Configure the Administration database.

Migration profiles

A migration profile is created for each user or database that you wish to migrate.

Migration profiles store the configuration settings that dictate how its user or database and the associated data are migrated to G Suite. These settings include:

• Migration status

• Database details (the primary database and any archives)

• Target address (Gmail user name or Group name)

• Migration parameters, such as cutoff dates, folder-mapping preferences, and a list of folders to include or exclude

For more information on registering users, see Register users and databases.

Deployment options

The system should be installed on one or more dedicated Domino servers at each mail server location (plus any locations that include document library or discussion databases to be migrated) in the organization. Migrating content across a WAN isn't recommended.

It is possible to install the system onto an existing mail server, however this is not supported. We strongly recommend installation on dedicated servers so that your production server performance is not degraded during the migration period.

Examples

Here are the two most common deployment scenarios. You can replicate these scenarios exactly, or you can use them as the basis for more customized deployments.

Single mail server, multiple migration servers

```
                        ┌─────────────────────────────┐
                        │       Migration Server      │
                        │ ┌──────────────┐ ┌─────────┐ │
                        │ │Administration│ │ Feeder  │ │
                        │ │Database      │ │Database │ │
                   ┌──▶ │ └──────────────┘ └─────────┘ │ ──┐
                   │    └─────────────────────────────┘   │
  ┌─────────────┐  │                                      ▼  ┌──────────┐
  │ Domino Mail │──┤                                         │ G Suite  │
  │ Server      │  │                                      ▲  └──────────┘
  └─────────────┘  │    ┌─────────────────────────────┐   │
                   │    │       Migration Server      │   │
                   └──▶ │ ┌──────────────┐ ┌─────────┐ │ ──┘
                        │ │Administration│ │ Feeder  │ │
                        │ │Database      │ │Database │ │
                        │ └──────────────┘ └─────────┘ │
                        └─────────────────────────────┘
```
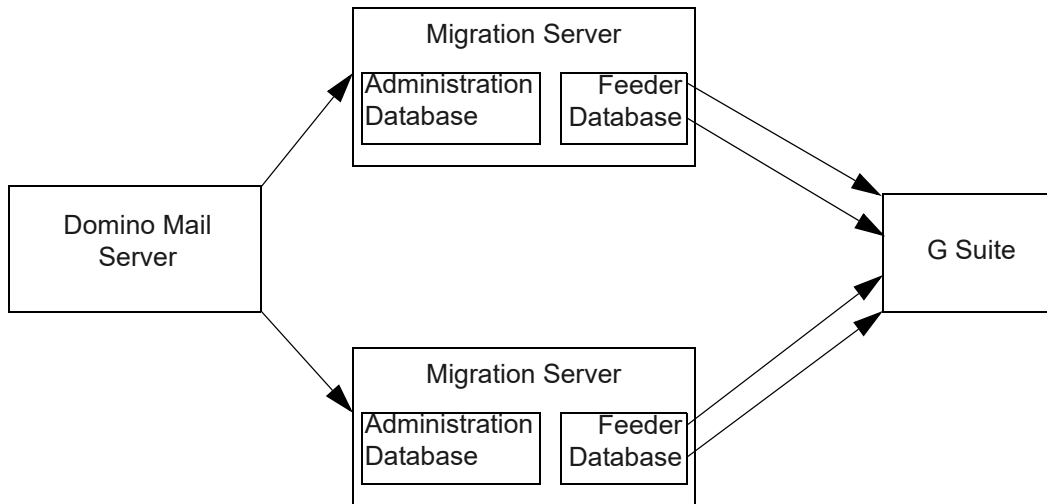
Note: In this scenario, each migration server migrates a unique set of users.

Multiple mail servers, single migration server

```
  ┌─────────────┐
  │ Domino Mail │
  │ Server      │
  └─────────────┘
         │
         ▼
  ┌─────────────────────────────┐
  │       Migration Server      │
  │ ┌──────────────┐ ┌─────────┐ │         ┌──────────┐
  │ │Administration│ │ Feeder  │ │ ───────▶│ G Suite  │
  │ │Database      │ │Database │ │ ───────▶│          │
  │ └──────────────┘ └─────────┘ │         └──────────┘
  └─────────────────────────────┘
         ▲
         │
  ┌─────────────┐
  │ Domino Mail │
  │ Server      │
  └─────────────┘
```
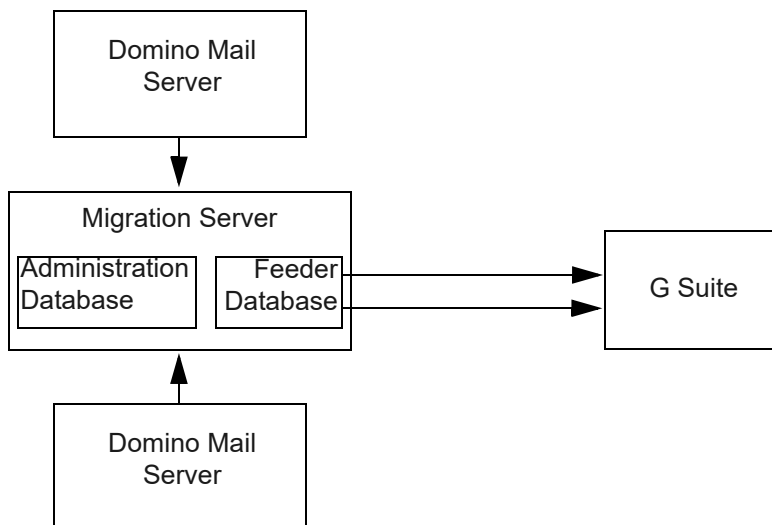
Installation

In order for you to successfully install and use G Suite Migration for IBM® Notes® (GSMIN), it's important that you carefully follow the guidelines provided here. This section outlines the system requirements you need to meet, preparations you need to make to your environment before you install the product, and the system installation and configuration process

G Suite and system requirements

To install GSMIN, your environment must meet the following minimum requirements for G Suite, IBM Notes (formerly Lotus Notes™), IBM Domino® (formerly Lotus Domino™), and Microsoft® Windows®.

G Suite requirements

Supported editions: G Suite Basic, Business, Enterprise, or G Suite for Education.

System requirements for migration server

- IBM Domino Server 6.5 or higher for Windows (32 or 64 bit).

- If you are adding dedicated migration servers to your network, those servers must be registered as part of your existing Domino Organization.

- Microsoft Windows 2008 server or higher.

- 2 GB RAM (minimum)

- Migration administrators require Editor or above access to all databases registered for migration.

- Microsoft Core XML Services 6.0. If your version of Windows does not include Core XML Services 6.09, you can download it at:

  http://www.microsoft.com/downloads/details.aspx?FamilyID=993c0bcf-3bcf-4009-be21-27e85e1857b1&DisplayLang=en

  Microsoft Core XML Services 6.0 is included with various Microsoft products (for example, Microsoft SQL Server and Microsoft Office). To see whether you have Microsoft Core XML Services 6.0 installed, you can search your Windows folder for msxml6.dll.

Note: GSMIN can be co-located with your Domino mail server if that computer meets all of the GSMIN system requirements, but this is advisable only if your users have stopped using IBM Notes mail prior to migration, because GSMIN consumes significant server resources as it migrates.

Things to do before you install GSMIN

Once you have decided on your deployment configuration, you need to do some preparatory work on those systems before you install GSMIN. If you ignore this preparatory work, you will encounter problems when you attempt to migrate your data.

Create a service account

Complete the steps in Create a service account.

Enable API access

To enable API access in G Suite:

1. From your Google Admin console, go to **Security** > **API reference**.

2. Check **Enable API access**.

Prepare the installation computer

Verify system requirements

Make sure that the computer on which you plan to install GSMIN meets all of the system requirements specified in System requirements for migration server.

Increase max concurrent agents and max LotusScript/Java execution times on migration servers

By using multiple feeder databases, you can run multiple simultaneous migrations from a single Notes server. In order to do this, you need to:

- Increase the daytime and nighttime values for **Max concurrent agents** on your server to 10.

- Increase the daytime and nighttime values for **Max LotusScript/Java execution times** to 1440 minutes.

    Note: Domino allows you to set execution times greater than 1440 minutes, which may be helpful for very large migrations.

These settings are found in **Server Document** > **Server Tasks** > **Agent Manager**.

Daytime Parameters		Nighttime Parameters	
Start time:	08:00	Start time:	20:00
End time:	20:00	End time:	08:00
Max concurrent agents:	10	Max concurrent agents:	10
Max LotusScript/Java execution time:	1440 minutes	Max LotusScript/Java execution time:	1440 minutes
Note: The following setting only applies to servers running R4.6 and earlier		Note: The following setting only applies to servers running R4.6 and earlier	
Max % busy before delay:	50	Max % busy before delay:	70

Check the mail server field on your migration servers

In your migration server's Server document, confirm that the **Mail server** field's **Server document** > **Basics** > **Server Location Information** section matches the **Server name** field **Server document** > **Basics**.

Check the number of MAIL.BOX files on each server

You need to have at least two MAIL.BOX files on each mail server and migration server to ensure optimum performance during migration.

To set the number of MAIL.BOX files:

1. Open Domino Administrator.

2. Click the **Configuration** tab, then click **Server/Configurations**.

3. Find the server configuration for each mail server and migration server.

4. In each server configuration, click the **Router/SMTP** tab, then click the **Basics** tab.
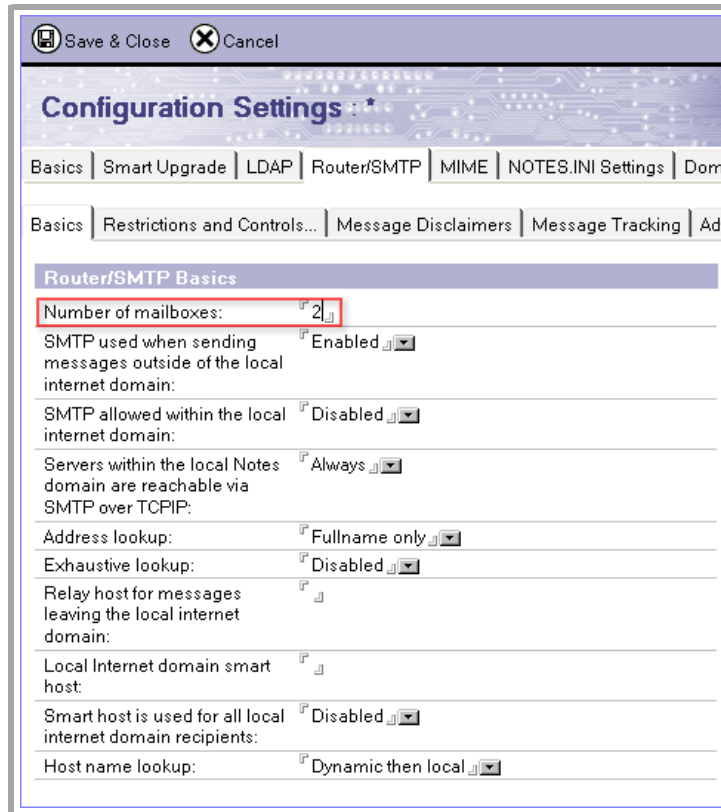
5. Set **Number of mailboxes** to 2 or more to ensure optimum performance during migration.

Set your migration servers' MIME outbound settings

Set your servers' MIME conversion settings so that Notes rich text is converted to HTML:

1. Open Domino Administrator.

2. Click the **Configuration** tab, then click **Server/Configurations**.

3. Find the server configuration for each migration server.

4. Click the **MIME** tab, click the **Conversion Options** tab, then click the **Outbound** tab.
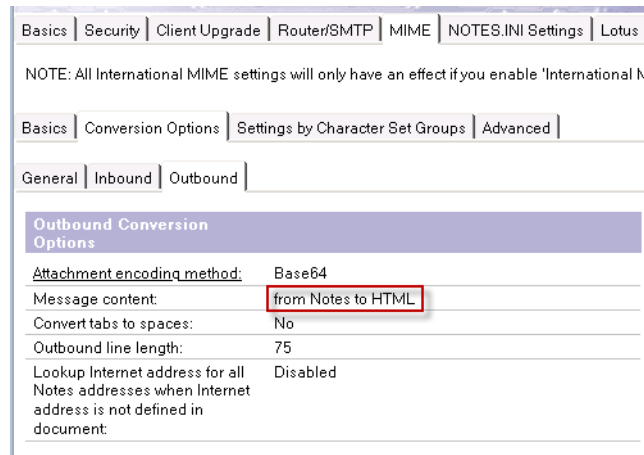
5. Set **Message content** to **from Notes to HTML**.

Optimize console output

To reduce console output as email is routed through the feeder databases, you should add the following line to the Notes.ini file for each mail server and migration server:

    converter_log_level=10

Set trusted servers

The servers on which you install the migration server need to have trusted access to your any Domino server that hosts mail files and databases that are to be migrated.

To identify your migration servers as trusted servers:

1. In the Domino directory, open the server document for each mail/database server.

2. On the **Security** tab, in the **Trusted servers** field, enter the name of the migration server.

Restart your servers

Restart each migration server and each mail server that is involved in the migration process.

Sign the installation templates and check access

Copy the three Notes templates provided in the installation kit (**gmail-migration.ntf**, **gmail-feeder.ntf**, and **gmail-log.ntf**) to the root **Data** folder on each migration server. This is typically the **x:\Lotus\Domino\Data** folder, but the location might vary depending on your - configuration. After you copy the templates, use the Domino Administrator client to sign "All design documents" with a trusted ID. We recommend the server ID.

The ID you sign the templates with requires the following minimum rights:

- *Designer access* to all mail databases that you want to migrate

- *Create database rights* on the migration server.

- *Editor access* to the Domino Directory, with *Create document rights* and the *NetModifier role*.

- Must be listed as an Administrator on all mail and migration servers.

- Must have the rights to run restricted agents on all migration servers.

Register the Service Account DLL on your migration server

Copy the appropriate Service Account DLL file **service_account_com_dll.dll** from your installation kit to the Domino program folder on each migration server. This is typically the **x:\Lotus\Domino** folder, but the location might vary depending on your server's configuration.

Note: If you are running a 32 bit version of Domino, copy the DLL file from the Service Account DLL **Win32** folder. If you are running a 64 bit version of Domino, copy the file from the Service Account DLL **x64** folder.

Register the DLL as follows:

1. Start a command prompt in elevated mode. To do this, right click over the Command Prompt icon in the Windows Start menu, and select Run as administrator,

2. Ensure you are in the correct folder. Move to **C:\Windows\System32** for 64 bit Domino, or **C:\Windows\SysWoW64** for 32 bit Domino.

3. Enter the following command.

   ```
   regsvr32.exe c:\Lotus\Domino\service_account_com_dll.dll
   ```

   {where c:\Lotus\Domino is your Domino program folder}

   If registration is successful you should see the following prompt:
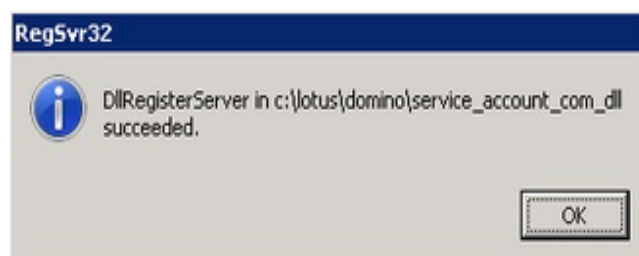
[Optional] Disable mail database replication

We recommend that you disable replication of mail databases during the migration process. Mail is flagged with a migration status as it moves through the process, and so the **Last Modified** property changes each time a message is flagged. Each time this property changes, the message is replicated, which can cause a significant amount of unwanted network traffic.

This recommendation presumes you plan to stop using Notes once the migration to G Suite has begun.

Check file-size restrictions

By default, your Domino servers do not restrict the size of an individual message. If you have imposed a file-size restriction at any point, you need to relax that restriction so that the mail servers can send legacy messages that exceed the file size to the migration servers.

To check the Maximum message size setting:

1. In the Domino Directory, open the mail server's Configuration document.

2. Click the **Router/SMTP** tab.

3. Click the **Restrictions and Controls** tab.

4. Click the **Restrictions** tab.

5. Set the **Maximum message size** to **0**. This value imposes no limit on message size.

Create the Administration database

Create the Administration database from the **G Suite Migration** template (**gmail-migration.ntf**) that you copied to your migration server and signed earlier. We recommend that you create the Administration database in its own folder (**gsmin**) on the migration server so that all Feeder and log databases are kept together in once place on the server.

Notes:

• When creating the database you need to select **Show Advanced Templates** when specifying the template to use.

• Create the Administration database from the template using the **Notes** menus. If you simply copy the NTF file to an NSF file, the monitoring agents won't run, and the ACL will not be configured correctly.

Configure the Administration database

When you create a new Administration database, you have the option of choosing Normal or Quick setup. This section uses normal setup. For details on how to configure the database using quick setup, see Using the Quick Setup wizard.

Select **Normal Setup** > **OK**. A new setup form opens automatically. Follow the instructions in the sections below to complete the setup form.

General tab

Configure the **General** tab as described below.

Status

Set this field to **Enabled** so the migrations can run. If you set this field to **Disabled**, the migration agents won't run.

Note: Disabling the system here doesn't kill any active migration processes. These will complete as normal.

Administrators

Select the users and groups you want as administrators. The default value is **LocalDomainAdmins**.

If you are not a member of LocalDomainAdmins, add your name here so you can complete the configuration process and have administrative access later.

Domino directory file name

Enter the name of the Domino directory.

Domino server time zone

Select the geographic location of the site. This information is used to ensure that calendar information is assigned to the correct time zone before it is migrated to G Suite.

Important: The value you choose here must match the time zone of the Windows server where GSMIN is running. If these two values do not match, calendar events will not migrate correctly, so you should double check your Windows settings at this point.

Migration start date

Enter the date on which you want migration to begin. The default value is today.

G Suite Domain tab

Configure the **G Suite Domain** tab as described below

Domain name

Enter the name of the primary G Suite domain to which you will be migrating data. You can find the primary domain name in the Google Admin console. Click **Domains** > **Add/remove domains**.

Domain administrator email address

Enter the full email address of your domain super administrator.

Authorization section

Complete the authorization section as follows.

You should have created your GSMIN project earlier. If you have not created your project yet, you must do so now.

1. Click **Upload Key File** and attach your **Service Account** key file that was downloaded from the API console to the Administration database.

   The setup form should now show your file attached:

Attachment Name	Modified
GAMLN-1b81425950bf.json	09/01/2015 02:13:15 PM

2. You must authorize GSMIN for your domain before you can begin to migrate content to G Suite. To authorize GSMIN:

   a. Ensure the Notes client is set to use the operating system's default browser when opening web pages. Refer to your Notes help for more information on setting your default browser for IBM Notes as the steps vary between different versions of the client.

   b. Click **Authorize**.

   c. Click **Get Authorization Code**.

   d. Log in to your G Suite domain using your super administrator credentials if prompted.

   e. Read the **Terms of Service** and, if acceptable, click **Allow**.

   f. Copy the code from the web page into the Authorize dialog box as shown below:

   Step 2: Paste the authorization code from the browser into the field below

   4/odt2gzyU_bql0A2AZgAHRpobQG_Tky8gfxSeMEZooGE

   g. Click **Get Access Token**. A message in the dialog box indicates the token has been obtained.

h. Click **OK**. Check the G Suite Domain tab and ensure that you have a valid Access token.

If you don't see an Access token valid from date, an error occurred during the authorization process. Troubleshoot using your migration log and Domino server console.

i. To complete the authorization process, you must grant the service account you created earlier access to a number of Google APIs. Do this by adding your service account's Client ID and a set of API scopes to the **Manage OAuth client access** page in the Admin console:

i. In your Google Admin console, click **Security** > **Advanced settings** > **Manage OAuth Client access**.

ii. Copy the **Client ID** from the setup form into the **Client Name** field.

iii. Copy the **Scopes** from the setup form into the **One or More API scopes** field and click **Authorize**.

Migration Profile Defaults tab

Configure the **Migration Profile Defaults** tab as described below. The values you set here become the default values for each new profile that you register for migration to a G Suite account and Google Group. You can change the values for individual users and databases after registration if required.

User Profiles

Allow users to modify content controls

Select **Yes** to allow users to set these values and **No** to prevent users from modifying the default values. The values are:

- Mail processing status (and all optional mail processing controls)
- Calendar processing status (and the optional cut off date)
- Contacts/groups processing status

Allow users to select archives

Select **Yes** to allow users to add lists of archived databases to their migration profiles and **No** to prevent users adding lists of archived databases to their migration profiles.

When a user selects a local archive, the file is moved to the migration server. In order to facilitate writing to the migration server, you need to give your users temporary **Create Database** and **Create Replica** rights on the migration server. These rights can be revoked after the migration has finished, or left in place if you plan to shut down your Domino servers after migration. This setting applies only to individual user rights. An administrator can always add archives to a profile.

Migration type

Select **Mail** if you want to migrate mail to the standard Gmail account or **Vault** to migrate to populate Google Vault.

Vault migrations require additional licenses. Mail migrated to Vault does not appear in the Gmail account. Calendar and Contacts migration are automatically disabled if you choose to migrate to Vault.

Mail processing status

Select **Yes** to migrate mail data for your users and **No** to not migrate mail data.

Optionally, you can set date controls for mail migration. You can migrate all mail from a specific date, all mail up to a specific date, or all mail between two dates. For example, if you have five years' worth of mail data, you can set this value to migrate mail from only the last year or two rather than from all five years. All dates entered are inclusive.

Tip: Being able to specify an end date is useful when you are enabling dual delivery to IBM Notes and G Suite. Set the end date to the same date that you turn on dual delivery. This ensures that any mail dual delivered to both Notes and G Suite isn't migrated by GSMIN, which could cause duplicate mail in G Suite.

Migrate mail from

Use one of the following options to identify the mail you want to migrate:

- **All folders** (default): Migrates mail from all folders.
- **These folders only**: Migrates mail from only the folders specified in this field.
- **All folders except these**: Migrates mail from all folders except the ones specified in this field.

Note: Mail in users' trash is not migrated regardless of which option you choose.

If you select **These folders only** or **All folders except these**, then you must enter the full hierarchical names of the folders. Use a backslash (\) to separate each folder level. Separate folder names with a comma.

Migrate junk mail

Select **Yes** to migrate mail from the Notes Junk Mail folder and **No** to exclude junk mail from the migration process.

Migrate truncated mail

If you are migrating mail archives and you retain truncated versions of the archived mail in the primary mail file, you should select **No** to allow the full version of the mail to be migrated later. The full version of the mail cannot migrate if the truncated version already exists in the G Suite account. Otherwise, enter **Yes** in this field.

Group archived mail

This field lets you group all archive mail under a top-level Gmail label called "Notes Archive". For example, if you set this field to **Yes**, any mail in the *Projects/Sales* folder in a Notes archive database is given the label *Notes Archive/Projects/Sales* in Gmail

Calendar processing status

Select **Yes** to migrate calendar data for your users and **No** to not migrate calendar data.

Optionally, set a date to identify the beginning of the time frame for which calendar data should be migrated. For example, if you have five years' worth of calendar data, you can set this value to migrate data from only the last year rather than all five years. The date entered is inclusive.

Contacts and groups processing status

Select **Yes** to migrate contacts and groups data for your users and **No** to not migrate contacts and groups data.

Note: For non-roaming users, personal contacts and groups can only be migrated if your users have synchronized their personal address book with their mail files on the server. Refer to your Domino help for more information on how to synchronize address books in your environment. A roaming user's contacts and groups are migrated from the server based address book that is specified in the user's Person document.

Groups Archive

Date range

Optionally, you can set date controls for mail migration. You can migrate all mail from a specific date, all mail up to a specific date, or all mail between two dates. All dates entered are inclusive.

Migrate mail from

Use one of the following options to identify the mail you want to migrate:

- **All folders** (default): Migrates mail from all folders.
- **These folders only**: Migrates mail from only the folders specified in this field.
- **All folders except these**: Migrates mail from all folders except the ones specified in this field.

Note: Mail in users' trash is not migrated regardless of which option you choose.

If you select **These folders only** or **All folders except these**, then you must enter the full hierarchical names of the folders. Use a backslash (\) to separate each folder level. Separate folder names with a comma.

Migrate junk mail

Select **Yes** to migrate mail from the Notes Junk Mail folder and **No** to exclude junk mail from the migration process.

Migrate truncated mail

If you are migrating mail archives and you retain truncated versions of the archived mail in the primary mail file, you should select **No** to allow the full version of the mail to be migrated later. The full version of the mail can't migrate if the truncated version already exists in the G Suite account. Otherwise, enter **Yes** in this field.

Network tab

Configure the **Network** tab as described below.

HTTP transport

Use **ServerXMLHttp**. XMLHttp should only be used for small migrations, demonstrations, or proofs of concept. XMLHttp does not support any proxy options.

Proxy server

Migrating through a proxy server is not recommended. However, if your Domino migration servers connect to the web through a proxy server, enter that server's address and port number here.

Proxy credentials

If your proxy requires credentials, enter the username and password.

Network time-outs

On occasion, you may experience time-outs between your servers and the Google servers. The normal behavior in these circumstances is for the system to exit early and wait for the next scheduled run.

To maintain normal system behavior, leave this set to the default value of **On**.

If you wish to ignore time-outs and have the system wait for the Google servers to respond, set this to **Off**. You should only do this, however, if you are experiencing regular time-outs.

Notifications tab

Configure the **Notifications** tab as described below.

User provisioning

Where you intend to provision users with GSMIN, you can choose the temporary password length and provisioning email template to use during the provisioning process or leave the default values as preferred.

By default, provisioning emails are sent to each user's Notes account. Alternatively you can route these emails to a single recipient by completing "Recipient (Leave blank to send to Notes account):" field. This can be useful during testing.

Notifications status

Setting this value to **Enabled** sends a notification to your users when the migration starts and completes. The system will also send an email to your migration administrators if migrations fail due to an unrecoverable error such as a network timeout.

Set to **Disabled** to prevent system notifications.

For information on notification templates, see Managing Your Migration.

Advanced tab

Configure the Advanced tab as described below.

Number of feeder databases/users per feeder

Enter the **number of Feeder databases** you want to use on this migration server. The maximum is 10. Feeder databases are created automatically by the Check Feeders agent.

For each Feeder database, the system creates a corresponding Mail-in database document in your Domino Directory.

Note: Do not create Feeder databases manually using the template provided. If you create databases manually, they are missing key profile information which is needed for the system to function as designed.

Enter the **maximum number of users** that each Feeder database can process during a single run of the Migrate agent. The default is 25.

Users are processed one at a time. Each time the Migrate agent runs, it processes one user after another until it has processed the number specified here. As active users move to the complete status during one cycle, slots become free for other active users to be processed during the next migration cycle.

Formula to generate a user email address from a Person document

Enter the name of the field in each Person document that contains the G Suite user name for each user you are migrating. Usually this is the *InternetAddress* field, but you can use any field.

This field is used to map Notes names to Internet names during the migration of mail, calendar, and contact data.

You can also enter a formula in this field. The formula is evaluated at runtime to map Notes names to Gmail addresses.

For example, the formula `@LowerCase(ShortName)+"@<mygoogledomain>.com"` takes the first value in each user's ShortName/User ID field, converts it to lowercase, and appends `@<mygoogledomain>.com` to create the Gmail address.

Note: An invalid formula results in name conversion failures during migration. Click **Check Formula** to validate your formula.

Formula to generate a group email address from a Group document

Domino does not add SMTP addresses to groups by default. However, Notes group names need to be converted to group email addresses for migration purposes.

Enter the field name or formula you want to use to generate the G Suite Group email address. This is typically the *InternetAddress* field, but you can use any Group document field.

You can also enter a formula. The formula is evaluated at runtime to map Notes names to a group address. For example, the formula `@LowerCase(ListName)+"@<mygoogledomain>.com"` takes the group name, converts it to lowercase, and appends `@<mygoogledomain>.com` to create the group address.

Note: An invalid formula results in name conversion failures during migration. Click **Check Formula** to validate your formula.

Service unavailability (50x) handling

Choose **Continue** if you wish the migration process to continue following a 50x server response. This ensures that any single piece of content that might cause a 50x does not stall the migration agents and the process will move onto the next email, event, contact etc., in the queue.

Select **Exit** early if you are experiencing genuine Service unavailability errors to direct the migration agents to pause for at least 15 minutes before retrying.

Retry failed migration attempts

Occasionally, an email, calendar event, etc., being migrated might trigger a Google 50x server response. When this happens, the item of content will be retried when the next migration cycle starts and as an exponential back-off process is also activated this has a detrimental impact on migration performance.

This control allows you to specify how many times GSMIN should retry a single item of content before it will remove it from the queue and mark it as a migration error.

Add status views to source databases

By default, the system will add migration status views to each source database. These views show what is yet to be processed, what has been migrated, migration errors, etc. This setting allows you to enable/disable the creation of these views.

Disabling this feature can be useful if disk space is an issue because the view indexes can take a significant amount of space.

Expand Domino groups during Google Group provisioning

Google Group owners and members are populated from the information in your database ACLs and Domino Directory. By default, nested groups in Domino are applied to the Google Group as a nested Google Group address.

Enable this feature if you want each nested group expanded to its individual members.

Enabling group expansion isn't recommended for the following reasons:

   •   Groups are more difficult to maintain if they are made up of user email addresses only.
   •   Each member and owner must be added individually to a Google Group. Where group expansion is applied, this can add considerable overhead to the provisioning process.

Out of Office agent checks

The system stamps each mail message that's migrated with a migration status value. In some rare instances, this update could trigger an out of office notification to the original sender of the message if the Out of Office agent was enabled. Because of this, the system does not process a user if the agent is enabled.

You can override this behavior by setting this field to **Disabled**. This can be useful if you are migrating only calendars and/or contacts. If you are migrating mail, you must determine that overriding the default behavior doesn't cause out of office notifications to be generated in your environment for any user that has the agent enabled.

Check and remove quotas before migration

Set to **Enabled** to have the system remove quotas as part of its preprocessing checks.

When mail quotas are used and a user's quota is nearly reached or has been exceeded, the system is not able to write the migration-status values back to the database. This will cause the system to repeat the migration multiple times for affected users.

By default, the system attempts to remove the quota on mail files as it processes them. For this to work, you should ensure that the ID you use to sign the GSMIN templates is also listed as an Administrator on each of your mail servers.

Set to **Disabled** if you don't use quotas or you want to use Domino Administrator to remove quotas on all mail databases prior to migration.

User level custom settings

The custom settings field lets you expose an additional tab on your Migration profiles. This tab contains a custom subform where you can place your own fields and controls to extend the functionality of the migration system.

See Custom Settings for more information.

Delay between HTTP posts

If you experience HTTP locks or service-unavailable responses from G Suite, you may need to increase this value to introduce a delay between successive posts. For optimum performance, keep the default value of 0.0.

Maximum mail size

This is the maximum message size allowed by Gmail. Messages greater than the size specified here won't be migrated.

Unknown From address

Gmail requires a valid SMTP address in the **From** header of every message. Where a valid address cannot be derived from the Notes message, the value you enter here (for example, no-reply@domain.com) is applied to the **From** header of the message. The original Notes value is added to the **Sent by** header of the migrated message.

Additional mail forms

If your mail files have forms other than Memo and Reply that meet the basic requirements of an email and you want to migrate those forms, enter the form names here.

Each document is checked to verify that it has at least the From, SendTo, and Body fields. If any of these fields is missing, that mail is excluded from the migration process.

Handling of email removed from Notes inbox

It's possible in IBM Notes to remove a message from the inbox without placing it in a Notes folder. The message is then visible in the *All mail* view in IBM Notes. This option allows you to control how this message is filed at migration time. The default is to show the message in the Gmail inbox, but you can also specify a Gmail label under which to file the message.

Include label information when migrating to Vault

Messages do not appear in the user account when migrating to Vault, and the system strips label information from messages to ensure that empty labels are not created in the G Suite account.

Set this value to **Enabled** if you want to keep the label information with the migrated message, but note that this can result in empty labels in user mailboxes.

Wait period for mail "Sent to repository"

Under normal circumstances, messages with the status "Sent to repository" are in the Feeder database and their next status is Migrated. On rare occasions, some email may not reach the Feeder database. This setting controls how long a message is allowed to remain at "Sent to repository" before the system checks the Feeder database for that message. If the message can't be located, the system resubmits it for migration.

Note: If a message is resubmitted and it is not successfully migrated on the second attempt, it may be corrupt, and the Domino mail router cannot process it. If mail persists at this status and you're unable to fix the corruption, you must exclude the message from migration. This can be achieved by placing the message into a particular folder in the Notes mail file and excluding this folder from the migration process. Do this by updating the "Migrate mail from" field on the migration profile.

Calendar migration test mode

Configuring the system according to this guide will ensure that events migrate correctly but an invalid configuration may require you to migrate your Notes calendars a second time. This can be difficult because Google Calendar rejects any attempt to add the same event multiple times. Even if you wipe the Google Calendar, conflicts will still occur because stubs are retained for a period of time following event deletion.

Calendar migration test mode allows you to test your configuration prior to running a full production migration of your IBM Notes calendars. In test mode, the system applies a random identifier to each copy of an event. Once you have verified the setup, you can wipe the Google Calendars and move onto production migration avoiding the possibility of conflicts.

When using test mode, you should follow these rules:

- Use test legacy and G Suite accounts where possible and delete these accounts once you have finished with them.
- Don't run a test mode migration if you have already started production migrations or if any users have started to use Google Calendar.
- If using live accounts remember to wipe the Google Calendars before running your production migrations.

Notes:

- The [TEST MODE] prefix is applied to all events migrated in test mode.
- Fan-out still occurs when test mode is enabled. Deleting the organizer's event or wiping the calendar ensures the removal of all attendee's copies.
- If you migrate the organizer's and attendees' copy of the same event, the attendee's calendar will show the event twice. This is because each copy of an event has its own randomly generated ID. During production migrations, event IDs are shared across all copies of the same event so duplicates can't occur.

Maximum thread size

This is the maximum message (or document) size allowed when migrating to a Google Group. Messages and documents greater than the size specified here won't be migrated.

Detailed migration event logging

Set to **Enabled** to have the system log document-level events to a Feeder log database. A separate log database is created for each Feeder. The log databases are created in the same folder as the Administration database.

When this feature is enabled, failures encountered during migration to the Google servers are also captured and stored as exception documents on the migration profiles.

Enable this option only to assist with the resolution of a problem, because it has a detrimental effect on performance.

Set to **Disabled** to prevent the system from logging document-level events.

Authentication, Token request, and Refresh token URLs

These are the URLs used by the system to request access tokens for G Suite APIs during the migration process.

Important: Don't change the values specified here unless advised to do so by Google Support.

Trace token

Use of trace tokens allows Google support engineers a better insight into specific types of API errors. This field should remain empty unless you have been provided with a trace token by Google Support.

Save your system configuration

After you have completed configuration of each tab, you should save the setup document.

Configure the Administration database ACL

Configure the Administration database ACL as described below.

Administrators

You should grant your migration administrators Manager access to the Administration database. You should also assign all administrators the [Admin] role.

-Default- entry

The -Default- entry in the Administration database is set to *Manager* when it is created. If you are using the invitation system and your users are updating their own profiles in the Administration database, then reduce this entry to *Author* and remove all role assignments. These users do not need document create or delete rights.

If your users do not need to update their profiles, then you do not need to grant them any rights. In this case, you should reduce the -Default- entry to *No Access* and remove all role assignments.

Register users and databases

After you have completed your setup form you can begin to register your users and databases for migration.

The following table shows which Notes database types can be migrated to which G Suite services:

	G Suite account	Google Groups archive	Google Vault
User mail file	Yes	No	Yes
Mail-in database	Yes	Yes	Yes
Document library	No	Yes	No
Discussion database	No	Yes	No

Support for each G Suite service also depends on which method you use for registration:

	Single database	By server	From Directory	Import from file
User mail file	Apps Account, Vault.	Apps Account, Vault	Apps Account, Vault	Apps Account, Vault
Mail-in database	Apps Account, Vault, Group Archive	Apps Account, Vault, Group Archive	Apps Account, Vault, Group Archive	Apps Account, Vault
Document library	Group Archive	Group Archive	N/A	N/A
Discussion database	Group Archive	Group Archive	N/A	N/A

- **Single database.** Register supported Notes database types from any server one at a time. The profile will point at the actual instance of the database you choose to migrate.

- **By server.** Register supported Notes database types from a single server in bulk. The profiles will point at the server you choose to register from. This is useful when you are migrating batches of users/databases that have been copied out of the production environment.

- **From directory.** Select users or mail-in databases from the Domino Directory. The profiles will point at the mail file specified in the Person and Mail-In Database documents in the Domino Directory.

- **Import from file**. Import a list of users and mail-in databases. The profiles will point at the mail file specified in the Person and Mail-In Database documents in the Domino Directory.

Status during migration

During the migration process, each profile's status changes as follows:

Status	Description
Draft	The user or database has just been registered but has not yet been activated in the system. Regardless of registration method, the profile's initial status is always Draft.
Invited	An Invitation-to-migrate email has been sent to the user. The email contains a link back to the profile in the Administration database. This allows the recipient to complete the profile and submit it for migration. This action changes the profile's status to Active
Active	Notes data is in the process of being migrated.
Complete	The Notes data has been successfully migrated.
Hold	An administrator has suspended the migration for the user or database. When the hold is released, the migration resumes from the point at which it was suspended.
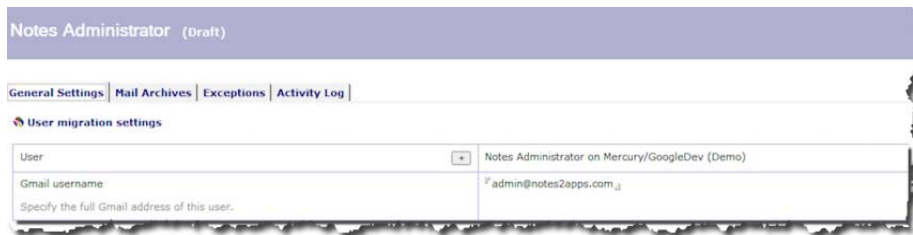
Register single database

This section describes how to register a mail database for migration to a G Suite account and the differences between registering for migration to a G Suite account and registering for migration to a Google Group.

To register a single database for migration:

1. Open the Administration database.

2. Select one of the views under **Migration Profiles**.

3. Choose one of the following:

   • To migrate to a G Suite account: Click **Register** > **For User Account** > **Single Database**
   • To migrate to a Google Group: Click **Register** > **For Groups Archive** > **Single Database**

4. In the **User** field, click **+**.

5. Select a server, and then the mail database you want to register.

6. If the correct **Gmail username** is not already displayed, enter the username in the **Values** column.

7. In the **Migration type** field, select one of the following:

   • **Mail** to migrate to the G Suite account
   • **Vault** to migrate directly to Google Vault.

   Note: If you migrate to Vault, you can't migrate calendar or contact information.

8. In the **Status** field, select one of the following:

   • **Yes** to enable mail migration for this user
   • **No** to disable mail migration for this user

   You also have the option to enter a start date, end date, or both to set a time frame for which mail is migrated.

9. In the **Migrate mail from** field, select one of the following:

   • **All folders** to migrate mail from all folders
   • **These folders only** to mail from only the folders you specify in this field
   • **All folders except these** to migrate mail from all folders except the ones you specify in this field

   If you select **These folders only** or **All folders except these**, you must enter the full hierarchical names of the folders. Use a backslash ("\") to separate each folder level, and separate folder names with a comma.

10. In the **Migrate junk mail** field, select one of the following:

    • **Yes** to migrate mail from this user's Junk Mail folder in IBM Notes
    • **No** to exclude Junk Mail from migration

11. In the **Migrate truncated mail** field, select one of the following:

   - **Yes** to migrate truncated mail
   - **No** to ignore truncated mail

12. In the **Calendar settings** > **Status** field, select one of the following:

   - **Yes** to migrate this user's calendar
   - **No** to exclude this user's calendar from migration

   You can set a cutoff date so that only appointments after that date are migrated. The date selected is inclusive.

13. In the **Contacts and group settings** > **Status** field, select one of the following:

   - **Yes** to migrate contacts and groups for this user
   - **No** to exclude this user's contacts and groups

14. If you want to migrate archived databases, click the **Mail Archives** tab.

15. In the **Archive databases** field, click **+**, then select the server and databases you want to migrate.

16. In the **Group archived mail** field, select one of the following:

   - **Yes** to show all mail from the Notes archive databases in the Notes Archive label in Gmail. Folder names are retained and converted to labels beneath the Notes Archive label.
   - **No** to treat Archived mail the same as mail from the primary mail database. In this case, the **Notes Archive** prefix is not added to the Notes folder names.

17. When you have finished configuring the user profile, click **Save** > **Exit**.

The Single Database registration method also applies to migrating a database to a Google Group. This process is similar to the one described above. Keep the following in mind when registering a single database for migration to a Google Group:

- Use the **Register** > **For Groups Archive** > **Single Database** menu option.

- Normal users can't be migrated to a Google Group.

- Vault migrations do not apply to Google Group migrations.

- Calendars and contacts cannot be migrated to a Google Group.

Register by server

To register all supported databases on a single server:

1. Open the Administration database.

2. Select one of the views under Migration Profiles.

3. Choose **Register > For User Account > By Server** or **Register > For Groups Archive > By Server** as required.

Setting	Value(s)
Server	+
Folder path	
Recurse subdirectories	○ Yes ⊙ No

4. In the *Server* field, click the **+** icon.

5. Select the server you want, then click **OK**.

6. In the *Folder path* field, enter the name of the folder that contains the users/databases you want to register.

7. In the *Recurse subdirectories* field, select **Yes** if you want to also register users/databases in subdirectories of the folder you named above.

8. Click **Register Now**.

Register from directory

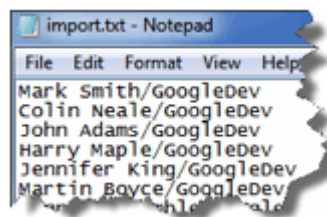**To register users or mail-in databases from the Domino Directory:**

1. Open the Administration database.

2. Select one of the views under Migration Profiles.

3. Choose **Register** > **For User Account** > **From Directory** or **Register** > **For Groups Archive** > **From Directory** as required.

4. If you are migrating to Apps Accounts, you can choose to register users or mail-in databases. If you are migrating to Google Groups, only mail-in databases are allowed. Select one or more users or mail-in databases from the list and click **OK**.

Register from a file

This registration method creates migration profiles for users and mail-in databases for migration to Apps Accounts only. It is not possible to use this method to register databases for migration to Google Groups.

To register users and mail-in databases from a file:

1. Create a text file that includes the names of the users and mail-in databases that you want to import into the Administration database. Each name should be on its own line. The users and mail-in databases must exist in the Domino Directory.

Each name must refer to a Person or Mail-In Database document in the Domino Directory. You can enter the name in Notes or Internet Address format.

2. Open the Administration database.

3. Choose **Register** > **For User Account** > **Import From File**.

4. Navigate to the file that you created earlier, and click **Open** to start the import.

Uninstalling the migration system

To uninstall the migration system:

1. Delete the Administration database.

2. Delete the Feeder databases.

3. Delete any log databases created by the system.

4. Delete the GSMIN template files from the server.

5. Delete the "Gmail Feeder <XXX>" Mail in database documents from your Domino directory where <XXX> matches the migration server name you are uninstalling.

6. Unregister and remove the Service Account DLL from your migration server. To do this, complete the following steps:

   a. Shut down the Domino server.

   b. Start a command prompt in elevated model. To do this, right click over the **Command Prompt** icon in the **Windows Start Menu**, and select **Run as administrator**.

   c. Change to either the C:\Windows\System32 folder for 64-bit or the C:\Windows\SysWoW64 folder for 32-bit Domino.

   d. Enter the following command:

   ```
   regsvr32.exe –u c:\Lotus\Domino\service_account_com_dll.dll
   ```

   (where C:\Lotus\Domino is your Domino program folder)

   e. Delete the service_account_com_dll.dll files.

   f. Restart the Domino server.

Upgrading GSMIN

We generally recommended that upgrades are performed by fully uninstalling and then reinstalling the latest version of the software following the instructions in this document. However, in certain cases, and when instructed by Google Support it is possible to upgrade to the latest version of GSMIN by completing the steps below:

1. Disable migrations. This is done from System setup document.

2. Delete the following templates from the migration server:

    *   gmail-migration.ntf
    *   gmail-feeder.ntf
    *   gmail-log.ntf

3. Wait for all migration agents to complete execution, and then check that all Feeder databases are empty before proceeding to the next step.

4. Delete the existing Feeder databases (gmail-feeder-1.nsf, gmail-feeder-2.nsf, ... gmail-feeder-10.nsf) and any Feeder log databases (if they exist) from the migration server.

5. Copy the new release templates to the migration server and sign them with the same ID that you used when installing the previous version.

6. Replace the design of the Administration database with the new G Suite Migration template (gmail-migration.ntf).

7. Enable the system from the System setup document.

What happens next

Within one hour the system will create new Feeders from the latest version of the Gmail Feeder (gmail-feeder.ntf) template. The migration agents will then start to process any active users listed in the Administration database.

If you encounter any issues during the upgrade process, you should uninstall and reinstall the software as documented above.

Managing Your Migration

When you have registered your users and databases, you are ready to begin the migration process with G Suite Migration for IBM® Notes® (GSMIN).

Before you start migration, you should assess how much information will be migrated to your G Suite account from IBM Notes (formerly Lotus Notes™).

Gathering premigration statistics

GSMIN has a feature that lets you estimate how much information will migrate to G Suite. It may be helpful to use this feature after your users and databases are registered but before you begin migrations. To gather premigration statistics:

1. Select the **Statistics** view from the menu.

2. Select the profiles for the users and databases you want to gather statistics for and click **Get Statistics**.

GSMIN completes the following steps for all selected profiles:

- Opens the databases referred to by the profile.

- Applies any date selection criteria specified on the profile and generates counts for documents that will be selected at migration time.

- Calculates the total amount of data in bytes that will be selected for migration. (Note: This value excludes any mail and/or calendar entries that are excluded by date criteria).

- Gets a total figure for all mail, calendar entries, groups and contacts in these databases. These figures do not take into account any date selection criteria applied for mail and calendar migrations.

Notes

- The process can take some time, because it needs to get the size of each document that will be migrated.

- You must have access to the source mail files and databases and must be an allowable author of the migration profiles to use this feature. If you do not have the required level of access, the system logs the event and moves on to the next selected profile.

- Only profiles with "Draft" or "Invited" status are shown in the Notes Statistics views.

- The figures in this view are meant to be used as estimates only and may not reflect the final migration counts/size. Some reasons for this are:

- Mail selected here may have an illegal attachment type which will be rejected at migration time.

- This view does not consider any folder exclusion rules.

- Notes mail sizes are typically smaller than the size of the mail posted to G Suite. For example, attachments are compressed in Notes but must be decompressed and converted to Base64 format prior to migration.

- If you want to gather and/or view statistics for only one particular content type, you can do this with the **Show** action. This action allows you to filter and gather statistics by individual content types. Each filter view shows only profiles for which the appropriate content type is enabled.

Migration calculator

The system includes a calculator that allows you to estimate migration times and bandwidth requirements for specific sets of users and databases. This is done by applying known migration rates to the Notes statistics gathered above.

To use the calculator, complete the following steps:

1. Run a minimum of 10 test migrations to allow the system to derive actual migration rates.

2. Register a set of users/databases for your live migrations.

3. Gather the premigration statistics for these users and databases.

4. Click **Calculator**.

5. Complete the table as follows:

   a. Select the number of migration servers you have at this location.

   b. Select how many hours per day you will allow migrations to run.

   c. Choose a MIME allowance. This value allows for the percent increase in mail size as Notes mail is converted to MIME as part of the migration process.

6. Click **Calculate**. Bandwidth and migration times are displayed.

Notes

- The MIME allowance is added to the computed feed time. This time is then added to the preparation time to derive the total time required.

- The values are estimates only and you should always monitor the actual migration rates and migration times and compare actual results with the results predicted by the calculator.

- Where you have more than one location, you should run the calculator for each separately to take into account differences in local bandwidth availability and network and server performance.

- You may see migration times must faster than those presented where Http compression is used during the migration process.

Activate users and databases

Newly registered users and databases are initially set to Draft status. Before information can be migrated, the status must be changed to Active.

There are a number of ways to activate a migration profile. These are detailed below.

Activate multiple users or databases

To activate multiple users or databases at once:

1. Open the **Draft** view.

2. Select the profiles you want to activate and click **Activate**.

You can also activate multiple profiles at once with the **Admin – Status Override** action.
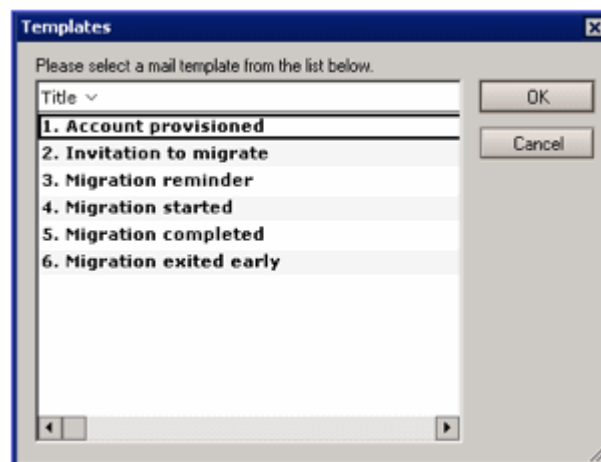
Activate by invitation

This method applies only to mail users. It is not applicable to mail-in, document library, or discussion databases.

To activate users by invitation:

1. Display a list of Draft users by opening one of the Migration Profile views in the Administration database.

2. Select the users to whom you want to send invitations, then choose **Send** > **Invitation**.

3. Click **Choose mail template**.

4. Select **Invitation to migrate**, then click **OK**.

   The invitation form is populated with information from the mail template. It also includes buttons that provide options for users to synchronize their address books, decrypt email, and start the migration.

5. Click **Invite Users**.

   Each user you selected is sent an invitation email with a link to the respective user profile in the Administration database. Each of those mail profiles moves to the status of Invited.

Mail templates

You can create mail templates to serve as invitations to start the migration process, as reminders, or as any other type of communication you need to make to your users. The following templates are provided, and you can use them as is or as the basis for new templates:

- Account provisioned

- Invitation to migrate

- Migration reminder

- Migration started

- Migration completed

- Migration exited early

Create a mail template

To create a new template:

1. Open the Administration database. Go to the **Notifications** tab on the **System setup** profile.

2. Click **New Email Template**.

⟶❘ Exit 🕮 Save	
Email Template	

Setting	Value(s)
Title	
Include link to user profile	No ▾
Greeting	▾
Name to use	▾
Subject	
Content	
Sign-off	▾

3. Complete the settings as follows:

Setting	Value
Title	Enter a title for the template. This value appears in any list of template choices.
Include link to user profile	Set to **Yes** if you want the email based on the template to include a link to the user's profile.
Greeting	Select or enter a greeting.
Name to user	Select the format for the name following the greeting: • First name only • Full name • None
Subject	Enter the subject for the message.
Content	Enter the body of the message. This can include rich-text elements and attachments.
Sign-off	Enter or select a closing for the message (for example, Regards or Sincerely).

4. Click **Save**, then click **Exit**.

The template is now available in any list of template choices, including the **Send** > **Invitation** and **Send** > **Email** commands.

Send invitations

You can send invitations only to users whose status is Draft. If you want to send an invitation to a user who has a different status, you first need to reset that user's status to Draft.

If you use the **Send** > **Invitation** command and select a user whose status is not Draft, no invitation is sent to that user.

Manage body content

You can add tags to the mail-template Content field. The tags are replaced at run time with the field values from the SETUP and USER document types.

To add a tag to the Content field, simply enclose the appropriate document type in double chevrons (<<*field name*>>).

For example:

Migrations from <<SETUP.Site>> will begin on <<<SETUP.MigrationStartDate>>

would return something like:

Migrations from Saturn will begin on 01/01/2015 (where Saturn is your migration server name)

Valid DocTypes are: SETUP and USER.

Note: There is also a special tag <<PASSWORD.GmailPassword>> that allows you to extract the user password that is generated by the provisioning component. This tag is only valid if included in the Provisioning email template.

**To find the field names for a document:**

1. Right-click the document, then click **Document Properties**.

2. Click the **Fields** tab.
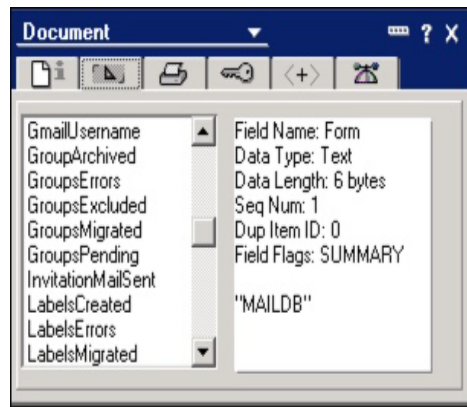
Manage mail files and databases

The system adds views to each mail file and database that it processes, so that administrators and users can track migration progress to the Notes document level (i.e., mail, calendar event, contact, and group).

Three views (Mail, Calendar and Contacts) are added where content is being migrated to a G Suite account. Calendar and Contacts views are not created for Vault migrations or for migrations to a Google Groups archive.
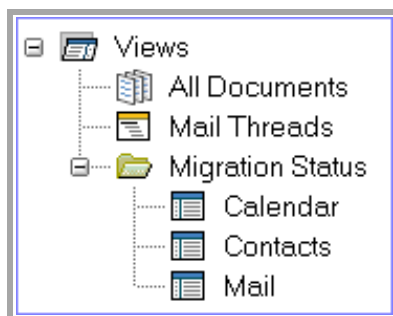
The following table outlines the different statuses applied to each type of document.

Status	Calendar	Contacts	Mail	Description
Unprocessed	Yes	Yes	Yes	Document not yet processed by the migration system.
Sent to repository	N/A	N/A	Yes	Mail has been routed to Feeder database for further processing.
Repository error	N/A	N/A	Yes	An error occurred when sending this email to the Feeder database. The system will try again later.
Migrated	Yes	Yes	Yes	Document sent to G Suite.
Migration error	Yes	Yes	Yes	An error occurred when sending this document to G Suite
Excluded	N/A	N/A	Yes	Mail was excluded for one of the following reasons: Mail was excluded by the *Migrate junk mail* setting in the user profile. Mail was excluded by a folder-exclusion rule. Mail was generated by the migration system. Mail contains an attachment not allowed by Gmail. Mail was excluded by the *Migrate truncated mail* setting on the user profile. Mail was encrypted. Mail exceeds the size allowed by G Suite. Mail has a corrupt body and could not be processed by the migration system. The entry is mail stationery and not a valid message.

Resubmit data to G Suite

To resubmit content that failed to migrate:

1. Open the original mail file or database.

2. Select the appropriate Migration Status view.

3. Select the documents you want to resubmit to G Suite, then click **Migrate Again**.

To migrate a user or database that was successfully migrated and moved to Completed status:

1. Open the Administration database and select the **Complete** view.

2. Double-click the profile that you want to reprocess.

3. Click **Migrate Again**.

   This action sets the migration profile back to Draft status. Once activated all previously migrated content will be migrated again.

   This action is not the same as just setting the profile back to Active, which migrates previously unprocessed content only. With this process, everything is reset to unprocessed and migrated again, so use this action with caution.

   When using this action, make sure you clear all mail, calendar, and contacts/group information from the G Suite account you're migrating to. If you are migrating content to a Google Group, you should delete and recreate the group in your G Suite domain before using this action.

Note: You can also flag multiple users for re-migration from the Complete view using the **Admin > Migrate Again** action.

Decrypt mail

Because Gmail does not read encrypted mail, the system does not migrate encrypted mail. Encrypted messages are visible in each user's mail database in the **Migration Status** > **Mail** view, and are categorized as Encrypted. To migrate those messages, the mail database owner must first decrypt them.

Have the user follow these instructions to decrypt messages:

1. Open the **Migration Status** > **Mail** view.

2. Select all messages categorized as Encrypted.

3. Click **Decrypt Email** in the action bar.

Those decrypted messages are migrated the next time the system process the user.

Note: The invitation-to-migrate email includes the Decrypt Email button, and users can decrypt mail before they initiate the migration process.

Monitor database sizes

During the initial phase of migration, email and any documents that are being migrated to a Google Groups archive are routed through the Feeder databases. This process generates a large amount of internal email traffic on your network. With this in mind, monitor the following conditions daily:

- The size of the MAIL.BOX databases. Check whether the server has been able to compact these databases, and if not, compact them manually.

- The size of the Feeder databases. These databases can become large when you are migrating large amounts of information. Check that the server has been able to compact these databases, and if not, compact them manually, or delete them when they are empty. The system automatically creates new Feeders within one hour.

- The indexes of the migration status views can become quite large, increasing the original mail file/database size by as much as 35%. Make sure that you have enough disk space on your servers to accommodate this growth.

Administration Tools

You have administration tools available at the view level, as well as a number of agents you can run from the **Actions** menu.

Change a user or database status

You can override the system workflow and change the status of one or more users or databases.

To change profile status:

1. In the Administration database, open one of the Migration Profile views and select one or more profiles.
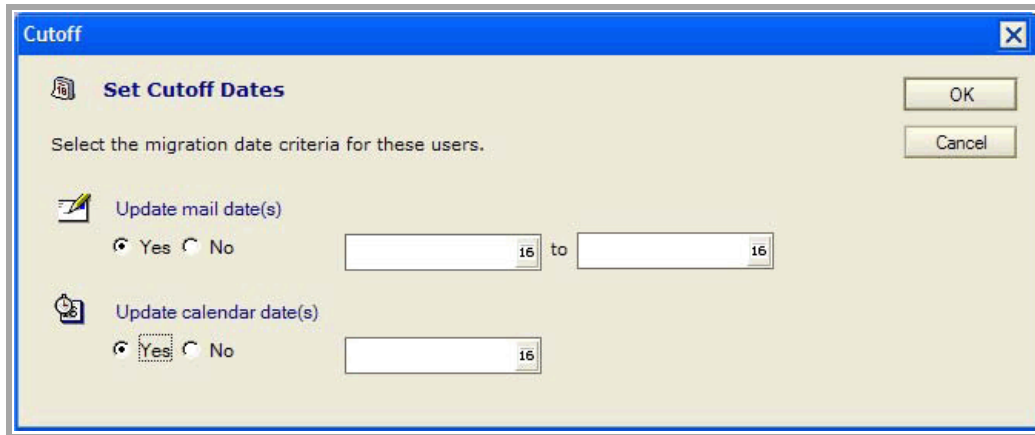
2. Click **Admin** > **Status Override**.

3. Select a new status.

4. Click **OK**.

Set migration cutoff dates

You can use this option to set migration cutoff dates for mail and calendar documents.

To set migration cutoff dates:

1. In the Administration database, open one of the Migration Profile views and select one or more profiles.

2. Click **Admin** > **Set Cutoff Dates**.

3. Select **Yes** for each type of document for which you want to set a cutoff date. Enter a date or click the calendar control to select a date.

4. Click **OK**.

To clear migration cutoff dates:

1. In the Administration database, open one of the Migration Profile views and select one or more profiles.

2. Click **Admin** > **Set Cutoff Dates**.

3. Select **Yes** for each type of document for which you want to clear the cutoff dates.

4. Leave the date field blank.

5. Click **OK**.

Toggle migration processing status for document types

You can use this option to toggle migration processing status for mail, calendar, and contact/ group documents for specific users and databases. For example, if Mail processing status is set to Yes for a user and you choose **Admin** > **Toggle Mail Status**, then Mail processing status is set to **No**.

1. In the Administration database, open one of the Migration Profile views and select one or more profiles.

2. Choose from:

- **Admin** > **Toggle Mail Status**
- **Admin** > **Toggle Calendar Status**
- **Admin** > **Toggle Contacts Status**

The processing status for each document type is switched from its previous setting.

Disable roaming status

The system migrates a roaming user's personal contacts and groups from their server based personal address book. If you prefer to migrate the contacts and groups from the user's mail file you can remove all references to a user's roaming address book from the user profile.

To disable roaming status:

1. In the Administration database, open one of the Migration Profile views and select one or more profiles.

2. Click **Admin** > **Disable Roaming Status**.

The system now treats the user like a non-roaming user and will migrate contacts and groups from the user's mail file. Disabling roaming status here <u>does not</u> change the user's roaming status in the Domino directory.

Migrate again

You can use this action from any of the Completed views to set profiles back to Draft status and flag the user/database for reprocessing.

To remigrate content for one or more users:

1. In the Administration database, open one of the Migration Profile completed views and select one or more profiles.

2. Click **Admin > Migrate again**.

This action sets the migration profile back to Draft status. Once activated all previously migrated content will be migrated again.

This action is not the same as just setting the profile back to Active, which migrates previously unprocessed content only. With this process, everything is reset to unprocessed and migrated again, so use this action with caution.

Actions menu agents

You also have access to the following agents from the Actions menu.

To access the agents, choose **Actions** > **Admin** > **<*agent*>**.

Running the agents from the Actions menu doesn't override any default schedules.

Purge documents

Runs the Purge Documents agent. By default, this agent runs on each migration server at 1:30 AM.

System-integrity checks

Runs a set of integrity checks against the system to make sure that all configuration documents are present. Also checks to see if there are any replication-conflict or save-conflict documents.

After you open the agent, click **Check System Integrity** and review the notes in the text field. If the agent identifies any problems, an email is sent to the global administrators.

If you see WARNING messages, see the table below for information about how to resolve the problem.

Warning	Remedy
xxx migration profile conflicts found...	Open one of the Migration Profile views and resolve the conflict.
xxx password conflicts found...	1. Open the ($Passwords) view: press CTRL + SHIFT, click **View** > **Go To**, then select ($Passwords). 2. Locate the conflicts and delete them.

Check network

Runs the Check Network agent. This agent allows you to test that your Domino server can communicate with Google servers. Refer to the Migration Log database for the results of the network test.

Export configuration

This option should only be used if directed to by Google Support.

Update project details

This option should only be used if directed to by Google Support.

Run migration report

This allows you to run a migration status report for one or more of your migration servers. You can choose between a summary or a detailed report. The report is produced in CSV format for loading into Sheets.

Configure Developers console

This option should only be used if directed to by Google Support.

Open a registered mail file or database

To open a registered mail file or database:

1. In the Administration database, open one of the Migration Profile views and select a profile.

2. Click **Open** > **Database**.

Domino Directory Migration

Provisioning Domino Groups and resources

G Suite Migration for IBM® Notes® (GSMIN) allows you to create groups and resources in G Suite from the groups and resources you have stored in your Domino Directory.

Provisioning groups

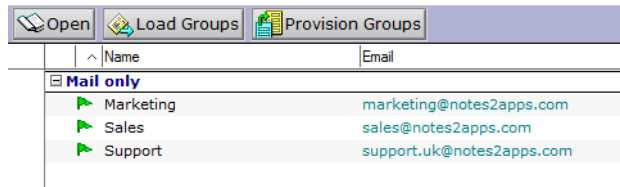The following actions can be performed only from a Notes Client for Windows.

1. Open the Directory Migration – Groups view.
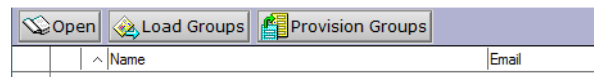
2. Click **Load Groups**. Choose which group types to load from the Domino Directory when prompted and click **OK**.
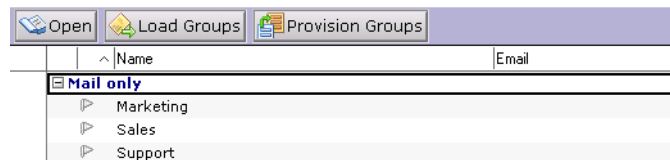
3. Select the groups once they have loaded and click **Provision Groups**. These groups are created in your G Suite domain.

Groups that are successfully created in G Suite are shown with a green flag. Failures are shown with a white flag. For more information, refer to the Migration Log database.

Provisioning resources

It is important that you populate the GSMIN Administration database with resource information *before* you start to migrate your users' calendars. Failure to do so will mean that GSMIN can't map Notes addresses to G Suite addresses, and resource information will not be captured during migration.

The following actions can be performed only from a Notes Client for Windows.

Before you provision your resources, you must ensure that your domain's sharing options have been set correctly.

1. Open your Google Admin console and choose **Settings** > **Calendar** > **General**. Set the **Within <YOUR DOMAIN>** sharing option to "Share all information" and click **Save changes**.

   Unless this field is set to **Share all information**, people who aren't managers of the resource will automatically have their invitations declined. See this Help Center article for more information:

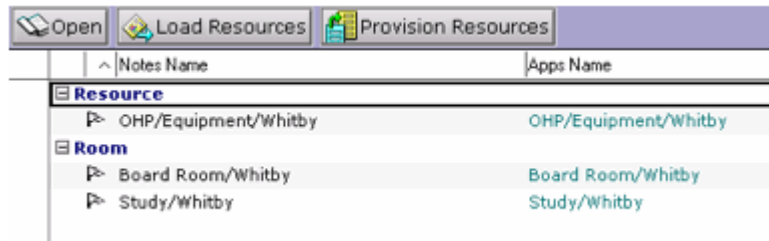   https://support.google.com/a/answer/1034381

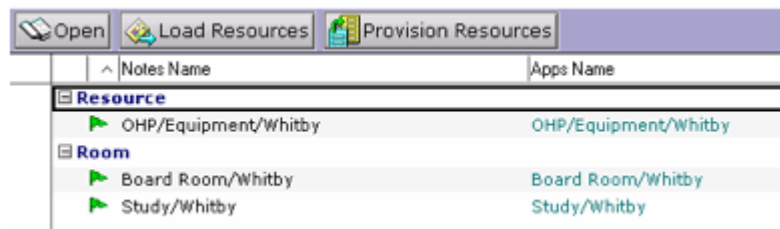   Once your migrations are complete, you should review your calendar resources sharing settings.

2. Open the Directory Migration – Resources view.
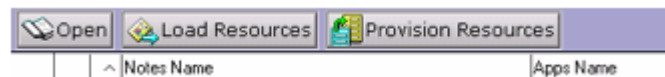
3. Click **Load Resources**. Choose which resource types to import from the Domino Directory when prompted and click **OK**.

Open	Load Resources	Provision Resources	
	∧ Notes Name		Apps Name
⊟ Resource			
	▷ OHP/Equipment/Whitby		OHP/Equipment/Whitby
⊟ Room			
	▷ Board Room/Whitby		Board Room/Whitby
	▷ Study/Whitby		Study/Whitby

4. Select the resources once they have loaded and click **Provision Resources**. These resources are migrated to your G Suite domain.

Open	Load Resources	Provision Resources	
	∧ Notes Name		Apps Name
⊟ Resource			
	▶ OHP/Equipment/Whitby		OHP/Equipment/Whitby
⊟ Room			
	▶ Board Room/Whitby		Board Room/Whitby
	▶ Study/Whitby		Study/Whitby

Resources that have been successfully created in G Suite are shown with a green flag. Failures are shown with a white flag. To find out why a particular resource creation has failed, open the Migration Log database and locate and expand the Provision Resources category.

Important:

Before you migrate Notes events that include resource bookings you must change the Auto-accept invitations setting for each of the Calendar resources in G Suite. This must be done manually for each resource as follows.

1. Sign into your G Suite account as your domain Super Administrator and open your Google Calendar.

2. Copy and paste the G Suite Internet address (e.g.: domain.com_12345d3456e616968636b616f746a656266e@resource.calendar.google.com) from the Resource document in the Administration database into the "Other Calendars" field in Google Calendar. The resource should now appear in your "My Calendars" list.

3. Hover your mouse over the Calendar resource name and select "Calendar settings" from the drop down menu.

4. Change the "Auto-accept invitations" value to "Automatically add all invitations to this calendar" and press the "Save" button to save your changes.

Repeat the steps above for each of your Google Calendar resources.

Notes:

- If you have already provisioned your resources in G Suite and you want GSMIN to add resource addresses to the events that it migrates, you should load the resources into GSMIN as described above. Make sure you only *load* the resources; don't attempt to provision them from GSMIN. After you've loaded the resources, you can edit each document and update it by adding the appropriate G Suite address, which you can find in your Google Admin console. GSMIN converts the Notes resource names to Google addresses at migration time.

- Don't delete the resource documents after they have been provisioned, because the values stored there are used during calendar migrations to ensure that rooms and resources booked in Notes are reflected in Google Calendar after migration.

- Google Calendar resources are populated from event information that is held in your users' calendars. The system does not migrate events that have been added directly into the Domino Resource Reservations database.

Extended and Mixed-Character Support

To configure the system to support extended character sets (such as Japanese as defined in ISO-2022-JP**):**

1. Open the Domino Directory, then open the **Configuration** > **Messaging** > **Configurations** view.
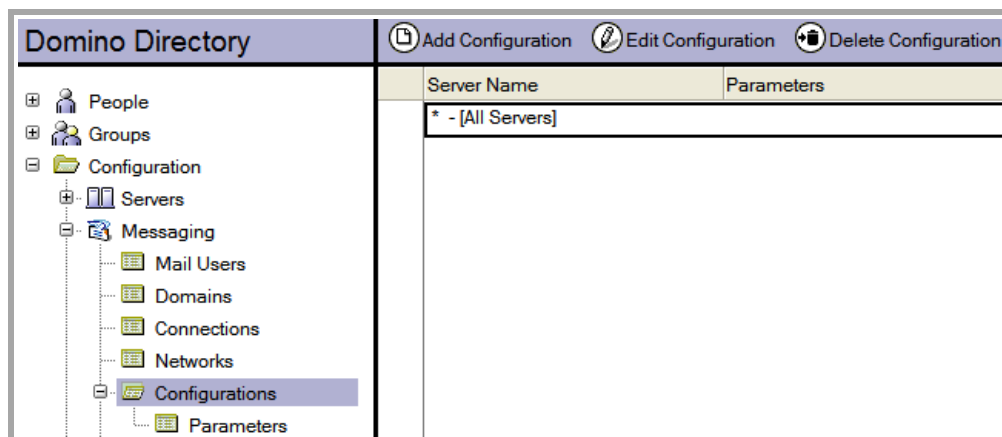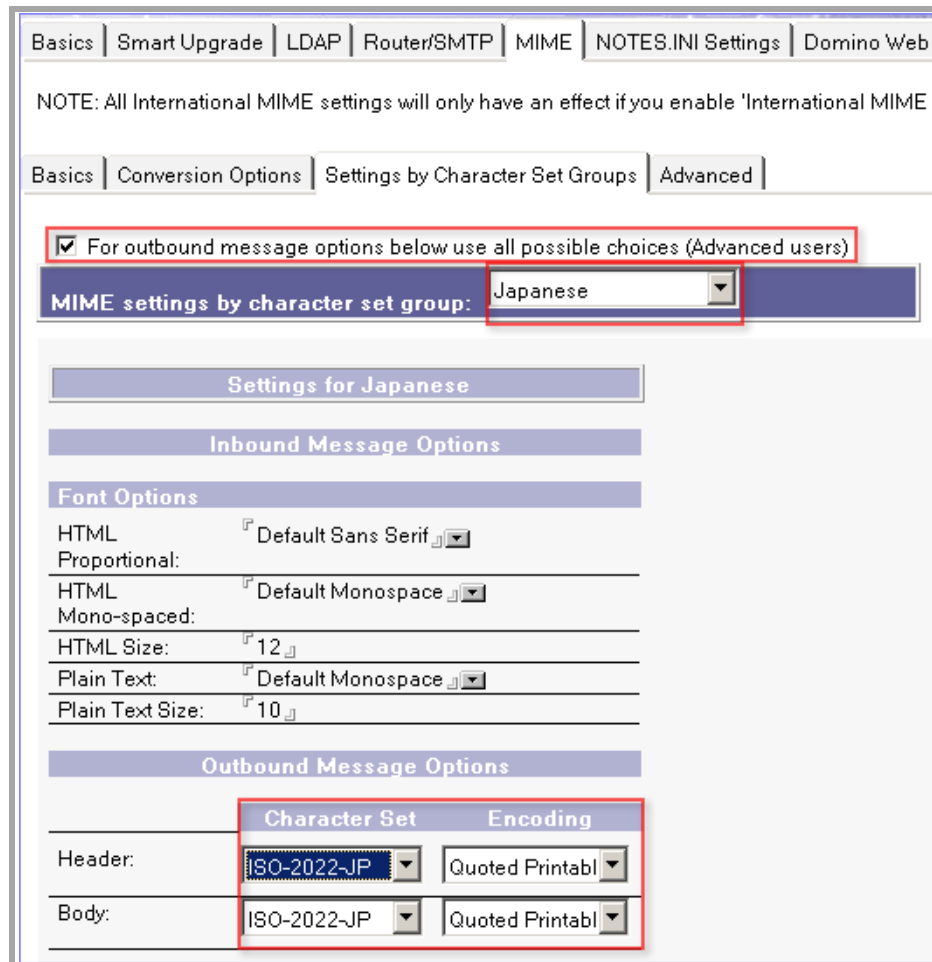

2. Edit the configuration documents that apply to your mail servers and to any server that is hosting the administration and Feeder databases, as described in the following steps.

3. Click the **Basics** tab.
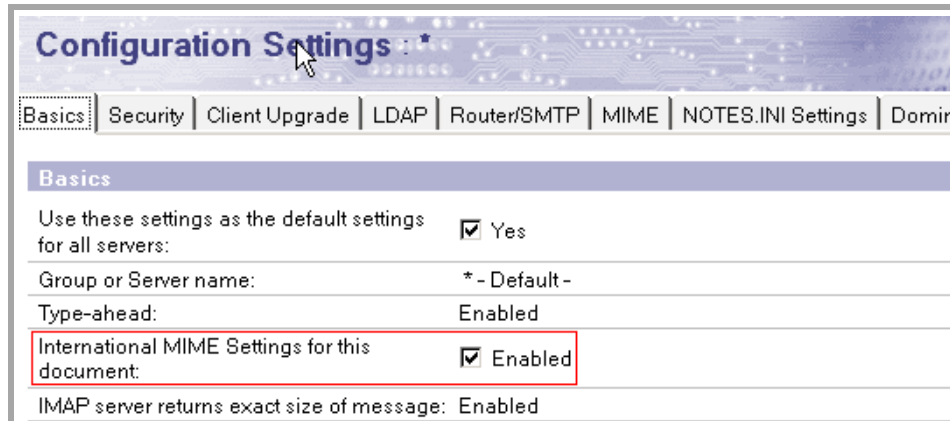
4. Set the *International MIME Settings for this document* field to **Enabled**.

5. Click the **MIME** tab, then click the **Settings by Character Set Groups** tab.

6. Select the **For outbound message options below use all possible choices (Advanced users)** check box.

7. Use the *MIME settings by character set group* menu to select the character set group you want.

8. Under *Outbound Message Options*, set *Header* and *Body Encoding* to **Quoted Printable**.

9. Save your configuration document.

10. Repeat the procedure for any server involved in the migration process that is not covered by the document you just modified.

11. When you have updated all of the configurations, restart all the affected servers.

Working with the GSMIN API

The Feeder databases include a script library, Custom Events, that includes routines designed to let you interact with the G Suite Migration for IBM® Notes® (GSMIN) API. The routines are described below.

PostFinaliseUser (userProfile As NotesDocument)

Called after all email, calendar, and contacts/group entries have been successfully migrated to G Suite, and the mail profile has the status of complete. Passes in the user's mail profile.

PostMigrateUser (userProfile As NotesDocument)

Called immediately after each user has been processed by the migration module. Because it may take multiple cycles to fully migrate a user, this routine can be called multiple times for a user. Passes in the user's mail profile.

PostMigrateUsers

Called at the end of each migration run.

PostUpdateRepository

Called at the end of each repository (Feeder database) update.

PostUpdateRepositoryUser (userProfile As NotesDocument)

Called immediately after the repository (Feeder database) has been updated for each user. Passes in the user's mail profile.

Function QueryFinaliseUser (userProfile As NotesDocument) As Integer

Called after all email, calendar, contacts/groups entries have been successfully migrated to G Suite, and just before the profile is set to complete. Return False to skip the user. Return True to let processing proceed. Passes in the user's mail profile.

Function QueryMigrateUser (userProfile As NotesDocument) As Integer

Called for each user prior to migrating content to G Suite. Return False to skip the user. Return True to let processing proceed. Passes in the user's mail profile.

Function QueryMigrateUsers () As Integer

Called just before the Feeder begins to process its first database. Return False to abandon the operation. Return True to let processing proceed.

Function QueryUpdateReposity () As Integer

Called just before the system populates the mail repository to convert Notes email to MIME email. Return False to abandon the operation. Return True to let processing proceed.

Note: All of the events listed above can also be used to interact with the processing of mail-in, document library, and discussion databases.

WARNING: Custom API code can interfere with the normal operation of the system. Google takes no responsibility for and provides no support for any system in which custom API code has been deployed and this code has been shown to interfere with normal operations.

Custom Settings

The system includes a custom subform that can be used to add additional fields and programming logic to your migration profiles.

By default, the Custom Settings tab is not displayed on your migration profiles. It is enabled from the Advanced tab of the System Setup form.

A common use of the subform is for the presentation of additional information about each user. This information can be derived from the logic of the form (for example, Domino Directory lookups for organizational details based on Notesname) or by using the API.

WARNING: Custom settings should only be added by an experienced Notes developer as this code can interfere with the normal operation of the system. Google takes no responsibility for and provides no support for any system in which custom subform code has been deployed and this code has been shown to interfere with normal operations.

Using the Quick Setup wizard

When you create the Administration database, you can complete a Normal or Quick Setup. The normal setup process is described in Create the Administration database.

To perform a quick setup, select **Quick Setup** from the **Choose a setup type** dialog and complete the steps below.

1. Confirm your Domino directory filename is correct. Choose your Domino server time zone then **Next**.

2. Enter your primary domain name and Administrator's email address

3. Click **Next**.

4. Click **Get Authorization Code**, sign in to your G Suite domain as the domain super administrator if asked, and grant GSMIN access to your domain. Copy the code presented to the setup wizard. Click **Get Access Token > Next**.

5. Click **Create Project**. This step will complete the following tasks which can take a minute or so to complete:

    a. Creates a project in the Google Developers console.

    b. Enables the APIs used by GSMIN

    c. Creates a Service account.

6. Click **Next**.

7. Click the **Service Account** link. This takes you to the Service Account in your newly created project. Edit the Service account, and enable Domain wide delegation.

8. Click the **Manage API Client Access** page link. This will take you to your G Suite domains control panel. Add the Client ID and scopes from the Quick setup wizard to this page and Authorize them.

    Note: The automatic creation of projects and service accounts is an early release feature of GSMIN. If you encounter problems, you can follow the normal setup process and complete the above steps manually.

Configure the Domino Directory

In Step 1 above, there is a **Configure Domino Directory** option. This optional step completes the configuration points that are covered in Prepare the installation computer.

The following is updated in the migration server document.

- Sets daytime and nighttime concurrent agents to 10

- Sets daytime and nighttime maximum agent run times to 1440

- If the signer of the GSMIN templates is a user, adds the username to the following fields:

    - Administrators
    - Sign or run unrestricted methods and operations

The following is updated in the server configuration document. If the server does not have its own configuration document, this step must be completed manually:

- Sets number of mailboxes to 2

- Sets message content to HTML

Troubleshooting

Logging

G Suite Migration for IBM® Notes® (GSMIN) uses the following types of logging:

The migration agents that run in the Feeders write summary and statistical information to agent log documents in the Administration database and to each migration profile. Processing information for each profile can be viewed by using the Migration Events action at the view level or by selecting the Activity Log tab on the profile.

1. Processing errors, such as a failure to migrate because the migration agents cannot access the original Notes mail file or database, are written to the migration profiles. Such profiles are shown in the "Processing Failures" view.

2. Agents that run in the Administration database, such as the Directory Registration and User Provisioning agents, write activity to a Notes Log database which can be found in the same folder where the migration software is installed.

3. By enabling detailed migration event logging a log database is created for each feeder, and the migration agents write details about all content migrated to these logs. Migration exceptions are also captured on the migration profile when detailed logging is enabled.

How GSMIN handles errors

In general, high-level errors (for example, errors associated with accessing resources on the Domino server, or logging into G Suite) are written to the logs and migration profile.

Low level errors (for example, failure to migrate a particular message) are:

- Shown as an increment to the error count for the user or database (see **Migration Profiles** > **With Errors** view)

- Optionally captured in a separate Notes document and visible from the Exceptions tab on the migration profile

- Optionally shown as error events in the Detailed Event logging database that is used by each Feeder

Error types

Initial communication errors

Before the system attempts to migrate any content, it performs a check against the domain to verify that GSMIN and the G Suite domain have been configured correctly. If this check fails, no users are migrated.

The most common causes for failure are:

1. Invalid scope URLs added to the Google Admin console

2. Invalid Google domain / OAuth parameters added to GSMIN

3. Local proxy and/or firewall restrictions

If GSMIN and the G Suite domain have been correctly configured and content is still not migrating, you should check that there are no firewall and/or proxy restrictions on your network that prevent the migration server from reaching the URLs specified in the GSMIN system setup profile.

You can check your network connectivity by running the Check Network agent from the **Actions - Admin** menu in the Migration Administration database.

Note: Google does not provide support for internal network issues. You must work with your own network team to resolve network issues.

Network errors

When a network error occurs, the actual HTTP error (for example, network time-out) is written to the migration log. If the administrator has enabled notifications, there is also an email notification of the error that includes a link to the migration log.

A network error is considered an unrecoverable early-exit error.

User and database processing failures

User or database processing failures occur when GSMIN cannot process a registered user or database. When this type of failure happens, the migration profile is visible in the **Migration Profiles** > **Processing Failures** view. The most common causes of a processing failure are listed below.

*   User, Group does not exist

*   Account suspended

*   Update forbidden for Mail, Calendar, Contacts, Groups, Google Group or Labels.

*   Cannot remove mail file quota

*   Out of office agent enabled

*   Database open error

*   Access checks failed

*   Reset database failure

- Label creation failure

- Unable to get access token

Processing failures can occur at activation time and other failures can occur during processing. Migration profiles that are locked remain Active and the system will continue to attempt to complete the migration, retrying during each migration cycle until the error is resolved.

Some errors clear automatically. For example, a user's profile can lock if the system attempts to migrate too many events for that user within a short period of time. This can result in a **Calendar Update Forbidden** response. Over time, the quotas reset, the profile will move out of the Processing failures view, and the migration will complete successfully.

Other locks, such a **Database open error** must be resolved by the Notes administrator before the system can proceed with the migration.

Migration errors

A migration error occurs when a single Notes document (mail, event, contact, group, or application document) cannot be migrated successfully. In this case, the error count on the migration profile is incremented, and the original document is marked as a Migration Error. If the administrator has enabled detailed migration event logging, the content and the Google server response are captured in an exception document which can be accessed from the **Exceptions** tab on the migration profile. The exception document also includes a doc link to the original content that failed to migrate.

Early-exit errors

An early-exit error often results from a network failure.

The following are common causes of an early-exit error:

- HTTP 503 error - Service unavailable

- MS XML error 213

- Domain suspended

- Admin quota exceeded

When an early-exit event occurs, GSMIN records the reason in the agent log and, if notifications are enabled, an email is sent to the administrators advising that the GSMIN agents had to shut down early.

How to respond to errors

For errors that involve individual users or databases, check the migration profile for any authorization problems and also check the **Migration Profiles** > **Processing Failures** view.

For low-level content migration problems, check the **Migration Profiles** > **With Errors** view to identify the problem accounts, then check the Migration Status views in original Notes files to see which documents have failed to migrate.

General troubleshooting

I have registered users, but nothing is happening; and I see the following entries in my server log:

> AMgr: Agent 'Migrate' in 'gmail-Feeder-1.nsf' does not have proper execution access, cannot be run

OR

> AMgr: Agent 'migrate' in 'gmail-Feeder-1.nsf' encountered error: Error validating user's agent execution access

The GSMIN templates were not signed before you installed the tool. You need to sign the Administration database and each of the Feeder databases with a trusted ID (server ID is recommended).

I'm getting an error that says "Notes error: Unable to open Name and Address Book..."

Make sure that the server on which the mail file resides has the migration server listed as a trusted server.

My migration quits with the following error in the Domino server log: Agent printing: ** Feed terminated: Microsoft Http / Network error occurred **

It is not uncommon to see occasional HTTP-connection timeouts. When these occur, the next migration run resumes from the point at which it left off.

You can set the system to ignore network time-outs. See Network tab for more information.

I'm seeing the following error in the log: The connection with the server was terminated abnormally

This can be caused by your internal network blocking the URLs to which the system is posting data. Check that these URLs are not blocked for your migration servers.

During migration, I see the following error: "Status code 403 - The user has exceeded their quota, and cannot currently perform this operation." What do I do?

Please contact Google Support.

The number of messages migrated to Gmail is less than the number of messages in my Notes inbox.

Notes messages that are replies to one another are threaded together as conversations in Gmail. Where you may have four *or* five Notes messages that are replies back and forth around the same subject, you'll have *one* Gmail conversation that comprises all those messages. Consequently, the number of migrated messages in Gmail can be significantly smaller than the original number in Notes.

I migrated a user's mail to a test account, and now I want to migrate it to his real account. What do I need to do?

1. Change the user's Gmail user name in his migration profile. See Register single database.

2. Use the Migrate Again button to reset all of the mail in that user's mail file. See Resubmit data to G Suite.

I have a user whose status seems to be stuck in Active.

1. Open the mail database for that user.

2. Expand **Views** > **Migration Status**, then check the Calendar, Contacts, and Mail views to see whether the migration has encountered an error, or if it is just proceeding more slowly than you expect.

I have an issue registering a specific user (Unable to locate Persons document in Domino directory).

First, check to see whether you are able to register other users.

If you can't register any users, you might not have the Domino directory filename correct in the System setup profile. Alternatively, you may have created the GSMIN Admin database on the client instead of the server.

If you can register other users but not this specific one, add the Database title as an additional entry to the User name field on this user's Person document. Afterwards, refresh the views in the Domino directory. You can do this by entering "Load updall names.nsf" into the server console on the migration server.

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