

## Domino to M365 v.7.6.0 ( C API)

### Emails

#### **Objective:**

Able to read Domino Server 12/14 user mailbox emails using the Domino C API for seamless migration to Microsoft 365.

#### **Pre-Requisite:**

##### **System and Software Requirements**

1. File System Access:
  - Requires **read and write permissions** for:
    - **Workspace Folder**
    - **Local NSF Folder**
    - **Application Installation Folder**
2. HCL Notes Client (64-bit):
  - Version 12/14 must be installed and properly configured.
3. Domino Server Configuration:
  - HCL Notes must be configured with a Domino Server connection.
4. Administrative Access:
  - The user logged into the migration server **must have Administrator privileges**.
5. VC++ Redistributable:
  - **Visual C++ 2012 and 2015 Redistributable** must be installed.
6. Power Settings:
  - Sleep mode for disk/machine **should be disabled**.
7. Antivirus Settings:
  - Antivirus should **not block the migration application**.
8. During Migration HCL Notes Client should be running/opened.
9. The option **“Don’t prompt for a password from other Notes-based programs”** should be checked in **User Security settings**.

To enable this, follow these steps:

  - a. Open **HCL Notes**

- b. Go to **File** → **Security** → **User Security**
- c. Enter your password when prompted
- d. In **User Security**, go to **Security Basics**
- e. Under **Your Login and Password Settings**, check the option “**Don’t prompt for a password from other Notes-based programs.**”

#### **Offline Mode Requirements:-**

- NSF files must be **available locally** on the machine.
- It is **recommended to replicate NSF files locally** for better performance and reliability.

#### **Network and Access Requirements**

1. After the application installation is complete, the process should be run using the **SysTools Service.exe**, and it must be executed with **administrator privileges**.
2. Domino Server IP:
  - Required for connectivity.
3. Domino User Credentials:
  - Password is required for the user configured in HCL Notes.
4. Online Mode:
  - The HCL Notes Client location should be set to **Online** mode (not “Local” or “Offline”).
    - Go to Notes → File → Preferences → Locations → verify active location.
    - Being online ensures direct Domino access.
5. Connectivity:
  - Domino Server and migration machine **must be able to communicate** over the network.
6. Migration Service Ports:
  - Ensure the following ports are open:
    - **16001**
    - **16002**
7. Default Port:
  - **443** (for secure HTTPS connections)
8. Bandwidth:
  - Minimum **100 Mbps** connection on the migration server is recommended.
9. PowerShell:
  - Must be installed on the migration machine.

#### **Access Permissions**

1. Domino Server User Access:

- Requires **minimum Reader access level** to user mail files.
- Like The User configured on Lotus Notes client should have **Reader** access to users NSF file which is selected for migration.
- Steps
  - [Files → Mail → Select user → Right click → Access Control → Manage → Add the configured User in it → Provide User Types “Person” access “**Reader**” level access.

## 2. Configured User access for Names.nsf:

- Must have **Manager access** to the Names.nsf file.
- Lotus Notes Client Configured User: [People & Groups → File→ Application →Access Control → Add the configured User in it → Provide User Types “Person” access “Manager” level access it.

## Destination Requirements:-

1. Microsoft O365 Admin account ID required for authentication
2. Project should be created on Microsoft Azure portal and Permissions granted on the Azure project.
3. The destination account should be present at the destination domain.
4. Destination account should have valid license.
5. Scope for Destination :-
  - a. Full Access (EWS).
  - b. Mail.ReadWrite.All.

## Environment Configuration :-

Ensure the following environment variable is set:

- C:\Program Files\HCL\Notes

## Required Accessible URLs :-

The following URLs **must be reachable** from the migration server:

- <https://syssales.appspot.com/>
- <https://outlook.office365.com/EWS/Exchange.asmx>
- <https://login.windows.net/>
- [Microsoft Graph Dev Center | APIs and app development](#) (Microsoft Graph Dev Center)
- <https://outlook.office.com/>

## Features:

| Feature              | Status   | Description                                       |
|----------------------|--|---|
| Demo Limitations     | 2 User   |   |
| Date Filter          | On Created and Posted date                     |   |
| Doc Links            | Not Supported                                  |   |
| Delta Migration      | Supported                                      | Only new calendar items will be considered.       |
| Folder Name Length   | Supported                                      | Length 64 characters                              |
| Folder Hierarchy     | Supported                                      |   |
| Trash                | Not Supported                                  |   |
| Junk                 | Supported                                      | It will be mapped with Junk Email folder in M365. |
| Email Conversation   | Lotus Notes itself do not support Conversation |   |
| Follow Up Flag       | Not Supported                                  |   |
| CN value Mappings    | Supported                                      | Provided that user listed in the User CSV         |
| On behalf of         | Supported                                      |   |
| HTML Text            | Supported                                      |   |
| Plain text           | Supported                                      |   |
| Read / Unread Status | Supported                                      |   |
| Inline Attachments   | Supported                                      |   |
| Attachments          | Supported                                      |   |
| Signature setting    | Not supported                                  | For signature created in settings.                |
| Internet Headers     | Supported                                      |   |
| Priority             | Supported                                      |   |

|  |               |  |
|--|---------------|--|
| Drafts                                   | Supported.    | Date Time is coming, when it was migrated.         |
| Date Time Retention                      | Supported     |  |
| Sensitivity                              | Not Supported |  |
| Default Folder Mappings                  | Supported     |  |
| Delivery Options Settings                | Not supported |  |
| Return Receipt mail                      | Supported     |  |
| Delivery Importance                      | Supported     |  |
| Highlighting in Email Body               | Not Supported | Not getting highlighting in Email Mime.            |
| DXL Attachments                          | Not supported |  |
| All Documents                            | Not supported |  |
| Mood Stamp-Normal                        | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Personal     | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Confidential | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Private      | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Thank you!   | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Flame        | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Good Job     | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |
| Delivery option- Mood Stamp-Joke         | Not supported | Mail gets migrated; Mood stamp Icons not migrated. |

|  |                |  |
|--|----------------|--|
| Delivery option- Mood Stamp- FYI                               | Not supported  | Mail gets migrated; Mood stamp Icons not migrated.                                   |
| Delivery option- Mood Stamp- Question                          | Not supported  | Mail gets migrated; Mood stamp Icons not migrated.                                   |
| Delivery option- Mood Stamp- Reminder                          | Not supported  | Mail gets migrated; Mood stamp Icons not migrated.                                   |
| Mail Body Highlighter  | Not Supported  |  |
| Indent paragraph in body                                       | Supported      |  |
| Outdent paragraph in body                                      | Supported      |  |
| Basic Tables in Mail Body                                      | Supported      |  |
| Tabbed table, in mail Body                                     | Not supported. | But its contents would come.   |
| Animated table, in mail Body                                   | Not supported. | But its contents would come.   |
| Caption table, in mail Body                                    | Not supported. | But its contents would come.   |
| Programmed table, in mail Body                                 | Not supported. | But its contents would come.   |
| Import option in Lotus Notes mail body                         | Not supported  |  |
| Ruler option in Lotus Notes mail body                          | Not supported  |  |
| Encrypt option in Lotus Notes mail sample                      | Not supported  |  |
| Max number of Recipient  | Supported      | 500 (Checked with 100)   |
| *Confidential: Mark Subject Confidential option in Lotus Notes | Supported.     | The email subject would have <b>Confidential</b> as a key word after migration.      |
| Undeliverable Mail   | Not Supported  | Migrated, but not as like source. Its subject and body contents are getting changed. |

|   |               |   |
|---|---------------|---|
| Calendar invitation trace report  | Not Supported | Migrated, but its body is not as like source. |
| Calendar invitation status[Accepted, Rejected, Tentative accepted etc.] notification mails                | Supported     |   |
| Max Email Size  | Supported     | 35 MB   |
| To , cc, bcc  | Supported.    |   |
| Mailbox having other than English language<br><br>In folder name ,subject, email body , attachments name. | Supported.    |   |
| Recall Message  | Supported.    |   |
| Other than English language folder  | Supported.    |   |
| Calendar invites  | Supported     | Migrated as a email in Inbox.                 |

## API:

**Source:** C API and Notes

**Destination:** Microsoft.Exchange.WebServices.Data (EWS)

## Limitation:

1. Default folder of HCL Notes will be mapped with Default folder of M365. If a folder in HCL Notes has the same name as a default folder in M365, an underscore (\_) will be prefixed to its name. For example, if a folder named 'Junk Email' exists at the root level in HCL Notes, it will be migrated as '\_Junk Email'.
2. Email form types which we support : "Memo", "Reply", "Return Receipt", "Personal Stationery", "Bookmark","NonDelivery Report", "Quota Report", "Trace Report", "Recall Response",  
"Recall Request", "Inmail", "INM", "ASM", "ReplyNotice", "(ReplyNotice)","Delivery Confirmation Report", "Delivery Report", "Notice".

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## Calendars

### **Objective:**

Able to read Domino Server 12/14 user calendar using C API so that it can be migrate to M365 user

calendar.

### **Pre-Requisite:**

#### **System and Software Requirements**

1. File System Access:
  - Requires **read and write permissions** for:
    - **Workspace Folder**
    - **Local NSF Folder**
    - **Application Installation Folder**
2. HCL Notes Client (64-bit):
  - Version 14 must be installed and properly configured.
3. Domino Server Configuration:
  - HCL Notes must be configured with a Domino Server connection.
4. Administrative Access:
  - The user logged into the migration server **must have Administrator privileges**.
5. VC++ Redistributables:
  - **Visual C++ 2012 and 2015 Redistributables** must be installed.
6. Power Settings:
  - Sleep mode for disk/machine **should be disabled**.
7. Antivirus Settings:
  - Antivirus should **not block the migration application**.
8. Local Replication:
  - It is recommended to **replicate NSF files locally** for performance and reliability.
9. During Migration HCL Notes Client should be running/opened.
10. The option **“Don’t prompt for a password from other Notes-based programs”** should be checked in **User Security settings**.

To enable this, follow these steps:

  - a. Open **HCL Notes**



- b. Go to **File** → **Security** → **User Security**
  - c. Enter your password when prompted
  - d. In **User Security**, go to **Security Basics**
  - e. Under **Your Login and Password Settings**, check the option “**Don’t prompt for a password from other Notes-based programs.**”
11. Turn off the [Calendar Repair Assistant \(CRA\)](#)
  12. It is recommended to migrate delegated and Manager mailboxes in the same batch.
  13. The destination account OneDrive should be preprovisioned.
  14. It is recommended to acknowledge to the end user that during the migration process avoid the movement of data between the folders.
  15. The throttling limit should be increased during the migration process. You can request a temporary increase in migration limits via Microsoft Support.
    - EWS (Exchange Web Services) Throttling
    - Graph API Throttling

#### **Network and Access Requirements**

1. After the application installation is complete, the process should be run using the **SysTools Service.exe**, and it must be executed with **administrator privileges**.
2. Domino Server IP:
  - Required for connectivity.
3. Domino User Credentials:
  - Password is required for the user configured in HCL Notes.
4. Online Mode:
  - The HCL Notes Client location should be set to **Online** mode (not “Local” or “Offline”).
    - Go to Notes → File → Preferences → Locations → verify active location.
    - Being online ensures direct Domino access.
5. Connectivity:
  - Domino Server and migration machine **must be able to communicate** over the network.
6. Migration Service Ports:
  - Ensure the following ports are open:
    - **16001**
    - **16002**
7. Default Port:
  - **443** (for secure HTTPS connections)

8. Bandwidth:

- Minimum **100 Mbps** connection on the migration server is recommended.

9. PowerShell:

- Must be installed on the migration machine.

### Offline Mode Requirements:-

- NSF files must be **available locally** on the machine.
- It is **recommended to replicate NSF files locally** for better performance and reliability.

### Access Permissions

1. Domino Server User Access:

- Requires **minimum Reader access level** to user mail files.
- Like The User configured on Lotus Notes client should have **Reader** access to users NSF file which is selected for migration.
- Steps
  - [Files → Mail → Select user → Right click → Access Control → Manage → Add the configured User in it → Provide User Types “Person” access “**Reader**” level access.

2. Configured User access for Names.nsf:

- Must have **Manager access** to the Names.nsf file.
- Lotus Notes Client Configured User: [People & Groups → File→ Application →Access Control → Add the configured User in it → Provide User Types “Person” access “Manager” level access it.

### Destination Requirements:-

1. Microsoft O365 Admin account ID required for authentication
2. Project should be created on Microsoft Azure portal and Permissions granted on the Azure project.
3. The destination account should be present at the destination domain.
4. Destination account should have valid license.
5. Scope for Destination :-
6. **Microsoft Graph API Permission**
  - a. Calendars.ReadWrite

### Office365 Exchange Online Permission

- full\_access\_as\_app

### Environment Configuration :-

Ensure the following environment variable is set:

- C:\Program Files\HCL\Notes

### Required Accessible URLs :-

The following URLs **must be reachable** from the migration server:

- <https://syssales.appspot.com/>
- <https://outlook.office365.com/EWS/Exchange.asmx>
- <https://login.windows.net/>
- [Microsoft Graph Dev Center | APIs and app development](#) (Microsoft Graph Dev Center)
- <https://outlook.office.com/>

### Features:

| Features                | Status    | Description                                 |
|-------------------------|-----------|---|
| Demo Limitations        | 2 User    |   |
| Date Filter             | Supported | On created date                             |
| Start Date              | Supported |   |
| End Date                | Supported |   |
| Folder Name Length      | Supported | Length 64 characters                        |
| Long Subject Characters | Supported |   |
| Notify Me               | Supported |   |
| Mark Private            | Supported |   |
| High Importance         | Supported | Added in body.                              |
| Category                | Supported |   |
| Location                | Supported |   |
| Recurrence              | Supported |   |
| Resources               | Supported |   |
| Delta Migration         | Supported | Only new calendar items will be considered. |

|  |               |   |
|--|---------------|---|
| Plain Text in Body   | Supported     |   |
| Future Event   | Supported     | The date range will be +1 year from the current date.   |
| All day event  | Supported     |   |
| Attendees  | Supported     | <p>We need to provide the user mapping csv to map the attendees.</p> <p>If user mapping csv is not provided then source attendees will be visible on destination.</p> <p>FYI will be mapped as required attendee.</p> |
| Time Zone Mapping  | Supported     |   |
| Calendar having other than english language<br><br>In folder name ,subject, calendar body. | Supported.    |   |
| Organizer  | Not Supported | The calendar events will migrate in context of individual user account. Hence the user will become the organizer of that event.   |
| HTML Body  | Not Supported |   |
| DocLink  | Not Supported |   |
| Attachments  | Not Supported |   |
| Inline images  | Not Supported |   |
| Embedded Attachment  | Not Supported |   |
| Same Event in multiple folders   | Not Supported |   |
| Rooms  | Not supported |   |

|  |               |  |
|--|---------------|--|
| Group Mapping                          | Not supported |  |
| Shared calendars                       | Not supported |  |
| Category Colors                        | Not supported |  |
| Custom Recurrences                     | Not supported |  |
| Mark Available                         | Supported     |  |
| Digital Signature and encryption       | Not supported |  |
| Return Receipt                         | Not supported |  |
| Do not Receive Responses from Invitees | Not supported |  |
| Prevent Counter Proposals              | Not supported |  |
| Prevent Delegation                     | Not supported |  |
| Online Meeting scheduled in Room       | Not supported |  |
| Body inline images                     | Not supported |  |
| Delivery options-Priority              | Not supported |  |
| Allows attendees to invite Others      | Not supported |  |
| Invitees status                        | Not supported |  |

#### **API:**

**Source:** C API and Notes

**Destination:** Microsoft Graph API and Microsoft.Exchange.WebServices.Data (EWS).

#### **Limitation:**

1. Calendar form types which we support : "Appointment".
2. Due to HCL C API behavior, duplicate events may be detected. These duplicate events are not migrated; however, they will still be reflected in the tool and report counts.

#### **Calendar Migration Known Points:**

1. Date filter is applicable only for events and not for calendar Folders.
2. All events will be migrated as appointment i.e. user may not be able to perform any operation like edit, cancel or update an event post migration.
3. Delta migration is applicable for future events, and only newly created future events will be applicable for the delta migration. If user modify the source account events after migration, then it will not be the part of delta migration.
4. The calendar events will migrate in context of individual user account. Hence the user will become the organizer of that event.
5. Team meetings will be migrated; however, the meeting links typically point to the source tenant and may not remain functional post-migration. These meetings will need to be recreated in the destination tenant after migration.

#### **Not Supported Recurrence Pattern :-**

There are some recurrence pattern which will be not supported like

1. Monthly By Date : Monthly Every month on 12th & 31st for 5 months and Monthly Every other month on 14th & 16th day for 2 years.
2. Monthly By Day : Monthly every month on 2nd Sunday & Monday for 10 months, Monthly every other Month on 2nd & 4th Sunday with End Date and Monthly Every Other Month on 1st Mon & 2nd Sun for 9 Months

#### **Note on Time Zone :-**

There are 4 time zone of source which are not present in M365 so we have mapped it with similar time zone check below we have mention them

| Source Time zone   | Destination Time zone |
|--|-----------------------|
| (UTC+00:00),Sao Tome                                       | UTC                   |
| (UTC+04:00),Izhevsk, Samara Standard Time                  | Astrakhan             |
| (UTC+11:00),Chokurdakh Time                                | Magadan Standard      |
| (UTC+12:00),Anadyr, Petropavlovsk-Kamchatsky Standard Time | Kamchatka             |

## Objective:

Able to migrate Domino Server 12/14 Contacts into M365 Contacts.

## Pre-Requisite:

### System and Software Requirements

1. File System Access:
  - Requires **read and write permissions** for:
    - **Workspace Folder**
    - **Local NSF Folder**
    - **Application Installation Folder**
2. HCL Notes Client (64-bit):
  - Version 14 must be installed and properly configured.
3. Domino Server Configuration:
  - HCL Notes must be configured with a Domino Server connection.
4. Administrative Access:
  - The user logged into the migration server **must have Administrator privileges**.
5. VC++ Redistributables:
  - **Visual C++ 2012 and 2015 Redistributables** must be installed.
6. Power Settings:
  - Sleep mode for disk/machine **should be disabled**.
7. Antivirus Settings:
  - Antivirus should **not block the migration application**.
8. HCL Client should be running/opened.
9. The option “**Don’t prompt for a password from other Notes-based programs**” should be checked in **User Security settings**.  
To enable this, follow these steps:
  - a. Open **HCL Notes**
  - b. Go to **File** → **Security** → **User Security**
  - c. Enter your password when prompted
  - d. In **User Security**, go to **Security Basics**
  - e. Under **Your Login and Password Settings**, check the option “**Don’t prompt for a password from other Notes-based programs.**”

### Offline Mode Requirements:-

- NSF files must be **available locally** on the machine.

- It is **recommended to replicate NSF files locally** for better performance and reliability.

#### Network and Access Requirements

1. After the application installation is complete, the process should be run using the **SysTools Service.exe**, and it must be executed with **administrator privileges**.
2. Domino Server IP:
  - Required for connectivity.
3. Domino User Credentials:
  - Password is required for the user configured in HCL Notes.
4. Online Mode:
  - HCL Notes Client must be in **Online mode** (check the current **Location**).
5. Connectivity:
  - Domino Server and migration machine **must be able to communicate** over the network.
6. Migration Service Ports:
  - Ensure the following ports are open:
    - **16001**
    - **16002**
7. Default Port:
  - **443** (for secure HTTPS connections)
8. Bandwidth:
  - Minimum **100 Mbps** connection on the migration server is recommended.
9. PowerShell:
  - Must be installed on the migration machine.

#### Access Permissions

1. Domino Server User Access:
  - Requires **minimum Reader access level** to user mail files.
  - Like The User configured on Lotus Notes client should have **Reader** access to users NSF file which is selected for migration.
  - Steps
    - [Files → Mail → Select user → Right click → Access Control → Manage → Add the configured User in it → Provide User Types “Person” access “**Reader**” level access.
2. Configured User access for Names.nsf:
  - Must have **Manager access** to the Names.nsf file.
  - Lotus Notes Client Configured User: [People & Groups → File→ Application →Access Control → Add the configured User in it → Provide User Types “Person” access “**Manager**”



level access it.

### Destination Requirements:-

1. Microsoft O365 Admin account ID required for authentication
2. Project should be created on Microsoft Azure portal and Permissions granted on the Azure project.
3. The destination account should be present at the destination domain.
4. Destination account should have valid license.
5. Scope for Destination :- Contacts.ReadWrite

### Environment Configuration :-

Ensure the following environment variable is set:

- C:\Program Files\HCL\Notes

### Required Accessible URLs :-

The following URLs **must be reachable** from the migration server:

- <https://syssales.appspot.com/>
- <https://outlook.office365.com/EWS/Exchange.asmx>
- <https://login.windows.net/>
- [Microsoft Graph Dev Center | APIs and app development](#) (Microsoft Graph Dev Center)
- <https://outlook.office.com/>

### Features:

| Features   | Status        | Description                   |
|--|---------------|-------------------------------|
| Demo Limitations   | 2 User        |                               |
| Date Filter  | Supported     | On created date               |
| Delta  | Supported     |                               |
| Contact Profile Photo  | Not Supported |                               |
| <b>Contact Name :</b> <ul style="list-style-type: none"><li>• Title</li><li>• First Name</li><li>• Middle Name</li><li>• Last Name</li></ul> | Supported     | Suffix added in contact body. |

|   |               |   |
|---|---------------|---|
| • Suffix  |               |   |
| Job Title   | Supported     |   |
| Company Name  | Supported     |   |
| Mark Private  | Not Supported |   |
| <b>Email :</b><br>1. Business<br>2. Personal<br>3. Assistant<br>4. Business2<br>5. Personal2  | Supported     | 3 email will be mapped and two will come in contact body                                  |
| <b>Phone Numbers :</b><br>1. Business<br>2. Home<br>3. Mobile<br>4. Fax<br>5. Pager<br>6. Assistant<br>7. Fax 2<br>8. Mobile 2<br>9. Business 2<br>10. Mobile 2 | Supported     | Business, Home, Mobile and Business 2 will be mapped and other will come in contact body. |
| Category  | Supported     |   |
| <b>Addresses :</b>  |               |   |
| Business  | Supported     |   |
| Personal  | Supported     |   |
| Other   | Supported     |   |
| <b>Other Information :</b>  |               |   |
| Messaging ID  | Supported     | Added in contact body.  |
| Department  | Supported     |   |

|  |               |   |
|--|---------------|---|
| Location   | Supported     | Added in contact body.  |
| Manager  | Supported     | Added in contact body.  |
| Assistant  | Supported     | Added in contact body.  |
| Website  | Supported     |   |
| Blog Site  | Supported     | Added in contact body.  |
| Spouse   | Supported     |   |
| Children   | Supported     | Added in contact body.  |
| Birthday   | Supported     |   |
| Anniversary  | Supported     | Added in contact body.  |
| <b>Custom fields :-</b> <ul style="list-style-type: none"> <li>• Custom 1</li> <li>• Custom 2</li> <li>• Custom 3</li> </ul> | Supported     | Added in contact body.  |
| Comments   | Supported     | HTML not supported.   |
| Name Information   | Supported     | View display name formate not supported other will be come in contact body.         |
| Certificates   | Supported     | Notes Certificates fields values come in contact body. Other will be not supported. |
| Attachment   | Not Supported |   |
| Inline Images  | Not Supported |   |
| Folder Hierarchy   | Not Supported |   |

## API:

**Source:** C API and Notes

**Destination:** Microsoft Graph API

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