

**Inware**

Inware Technologies  
Email Shuttle Notes Extractor

## Contents

Introduction.....	3
Contact Information .....	3
Architecture.....	4
Prerequisites and System Requirements .....	4
Minimum System Requirements.....	5
Migrating to Microsoft Exchange-.....	6
Prerequisites .....	6
Setting Permissions - Microsoft Exchange 2007/2010.....	6
Setting Permissions - Microsoft Exchange 2013 .....	7
Setting Permissions - Office 365 .....	7
Migrating to Lotus Notes - Prerequisites .....	7
Migrating to an IMAP-4 System - .....	7
Prerequisites .....	7
Installing the Inware Email Shuttle.....	8
Lotus Notes Extractor Configuration.....	10
Exchange / Office 365 Loader Configuration.....	14
Migrating to Lotus Notes .....	22
IMAP / Cloud Loader Configuration .....	23
Migration User Selection .....	28
Start the Migration .....	28
Mailbox Verification.....	29
Migration Flow Overview.....	29
Extracting from Lotus NSF Files.....	30
Frequently Asked Questions .....	31
Lotus Notes Extractor .....	31
Microsoft Exchange Loader.....	35
Notes Loader .....	36
IMAP-4 Loader .....	37

## Introduction

Thank you for choosing the Inware Email Shuttle as your email migration solution. This manual, as well as the software described in it, is furnished under license and may only be used or copied in accordance with the terms of such license. The information in this manual is furnished for informational purposes only, is subject to change without notice, and should not be construed as a commitment by Inware Technologies, Inc. Inware Technologies, Inc. assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

Except as permitted by such license, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means – electronic, mechanical, recording, or otherwise – without prior written permission from Inware Technologies, Inc..

Inware Email Shuttle, LaunchPad, NameStar, and Bay files are trademarks of Inware Technologies, Inc. All product and company names herein may be trademarks of their respective owners.

If you need assistance or have questions, please do not hesitate to contact us.

## Contact Information

Inware Technologies, Inc.  
501 Goodlette Rd N. Suite D-100  
Naples, Florida 34108  
USA

Contact (Sales, General Inquiries, and Customer Service):

Direct: (+1) 239-384-9335

Facsimile: (+1) 239-961-9437

Email: [greg.davidson@inwaretechnologies.com](mailto:greg.davidson@inwaretechnologies.com)

Technical Support:

Email: [shuttlesupport@inwaretechnologies.com](mailto:shuttlesupport@inwaretechnologies.com)

Phone: (+1) 239-592-1816

## Architecture

The Inware Email Shuttle was designed with pure performance and data fidelity at the core. Our solution provides an industrial strength tool for managing migrations. The Inware Email Shuttle considers a migration to consist of two parts – the email system migrated from and the e-mail system migrated to. The Inware Email Shuttle has a corresponding component for each of these two parts – an Extractor to perform the migration from the legacy system and a Loader to perform the migration to the target system.

### Inware Email Shuttle Extractor

The Inware Email Shuttle Extractor extracts data from the legacy e-mail system. After defining users to migrate and the specific location and requirements of data on the legacy system, the Inware Email Shuttle Extractor automatically retrieves the data and places it on a local or network drive.

### Inware Email Shuttle Loader

The Inware Email Shuttle Loader loads data to the target e-mail server or cloud based email system. After defining the specific locations and requirements of data on the legacy system, the Inware Email Shuttle Loader automatically retrieves the data from the local or network drive and populates the target e-mail system.



Figure 1- Inware Email Shuttle Architecture

## Prerequisites and System Requirements

The amount of time that it takes to install the Inware Email Shuttle is heavily dependent on the email systems involved, as well as the environment and the configuration of your migration system. Installation and end-to-end testing can take as little as a half an hour or it could take days. Inware Technologies, Inc. makes no claim as to the amount of time required for installation, testing and production migrations. Should it be required, Inware Technologies Support will make reasonable efforts to assist you in the configuration of each machine within your environment, so that the installation goes as quickly as possible. The prerequisites listed below must be met according to which system you are migrating to and from. For example, when migrating from Lotus Notes to

Microsoft Exchange, be certain that the prerequisites for each of these systems as listed below are met.

This initial configuration is ultimately the hardest part of the process. Once configured and running, sit back and watch the Inware Email Shuttle migrate your data. If you experience problems after meeting these prerequisites, contact our technical support team.

If you have already installed the product, then it is likely that you have met each of the software prerequisites. The key prerequisite remaining will be to ensure that you have administrative access (with an account/profile) to the mailboxes for migration from the legacy system and administrative access (with an account/profile) to the mailboxes for migration to the target system.

## Minimum System Requirements

To use the Inware Email Shuttle Lotus Notes Extractor, you need to meet the following minimum system requirements:

- Inware Email Shuttle may be installed on a PC with Windows XP Pro, Windows Vista or Windows 8-32 bit.
- If the IMAP-4 server is LDAP enabled run the Inware Email Shuttle through Launchpad as usual (User will need to know the details of their LDAP directory for required attributes). Otherwise, configure shuttlin file manually, configure extractor through Mission Control and launch extractor manually.
- The most recent service pack for the version of Windows installed on your migration PC. If running Windows 2000, then Windows 2000 Security Rollup Package, January 2002 or Service Pack 3 (WLDAP32\_VERSION "5.0.2195.4436" or higher)
- 100 MB available hard-disk space for minimum installation.

*Optimally, sufficient Hard Disk space should be available on the Migration PC to contain all user data to be migrated. If this is not possible, configuration changes can be made to require less space or a mapped network drive can be used to contain this data, but these measures can reduce performance speed.*

## Migrating to Microsoft Exchange-

### Prerequisites

Prior to running the LaunchPad, the destination accounts must exist in the Active Directory, and must be mail enabled, with Exchange mailboxes. The mailboxes **ARE NOT** automatically created.

1. Setup a migration machine running a desktop Windows OS such as Windows XP Professional or Windows 7.
2. Sufficient Hard Disk space should be available on the Migration PC to contain all user data to be migrated. If this is not possible, configuration changes can be made to require less space or a mapped network drive can be used to contain this data, but these measures can reduce performance speed.
3. Install Microsoft Outlook with the optional CDO component. Outlook 2000 or XP are preferred. CDO is a standard component of Outlook 2000 or XP, but is a separate component of Outlook 2007.
4. In Active Directory, create a mail-enabled user named "Eshuttle". This account will be given Service Account access rights to all mailboxes in your destination Exchange server.

### Setting Permissions - Microsoft Exchange 2007/2010

An administrative account must be established in the Active Directory. Open the PowerShell on your Exchange 2007 server and run the following command line:

```
Get-mailboxserver <servername> | add-adpermission -user eshuttle -  
accessrights GenericRead, GenericWrite -extendedrights Send-As, Receive-As,  
ms-Exch-Store-Admin
```

The parts in <> should be changed to represent the indicated values in your environment.

## Setting Permissions - Microsoft Exchange 2013

PowerShell on your Exchange 2013 server and run the following command line:

```
Get-Mailbox -ResultSize unlimited -Filter {(RecipientTypeDetails -eq 'UserMailbox') -and (Alias -ne 'Admin')} | Add-MailboxPermission -User eshuttle -AccessRights fullaccess -InheritanceType all
```

## Setting Permissions - Office 365

The Eshuttle account must be given access rights of a User Management Admin or higher to allow access to the destination mailboxes.

## Migrating to Lotus Notes - Prerequisites

The version of the Notes Client to be installed on the migration PC should match the version of the Lotus Notes server you will be loading into. Loading into Lotus Notes 7.x or lower is currently supported.

1. Install the Notes Client, R5 or higher preferred.
2. Configure the Notes Client to use an Administrative ID file, and then close the Client. The Notes ID file used for loading needs to have Manager access to all mailboxes in Notes. The Notes Loader will log in with the last ID file used to access the Notes Client.
3. Verify that the path to the Notes Client directory (generally c:\lotus\notes) is included in the Environment path on the migration PC.
4. Install and run the Inware Email Shuttle.

## Migrating to an IMAP-4 System -

### Prerequisites

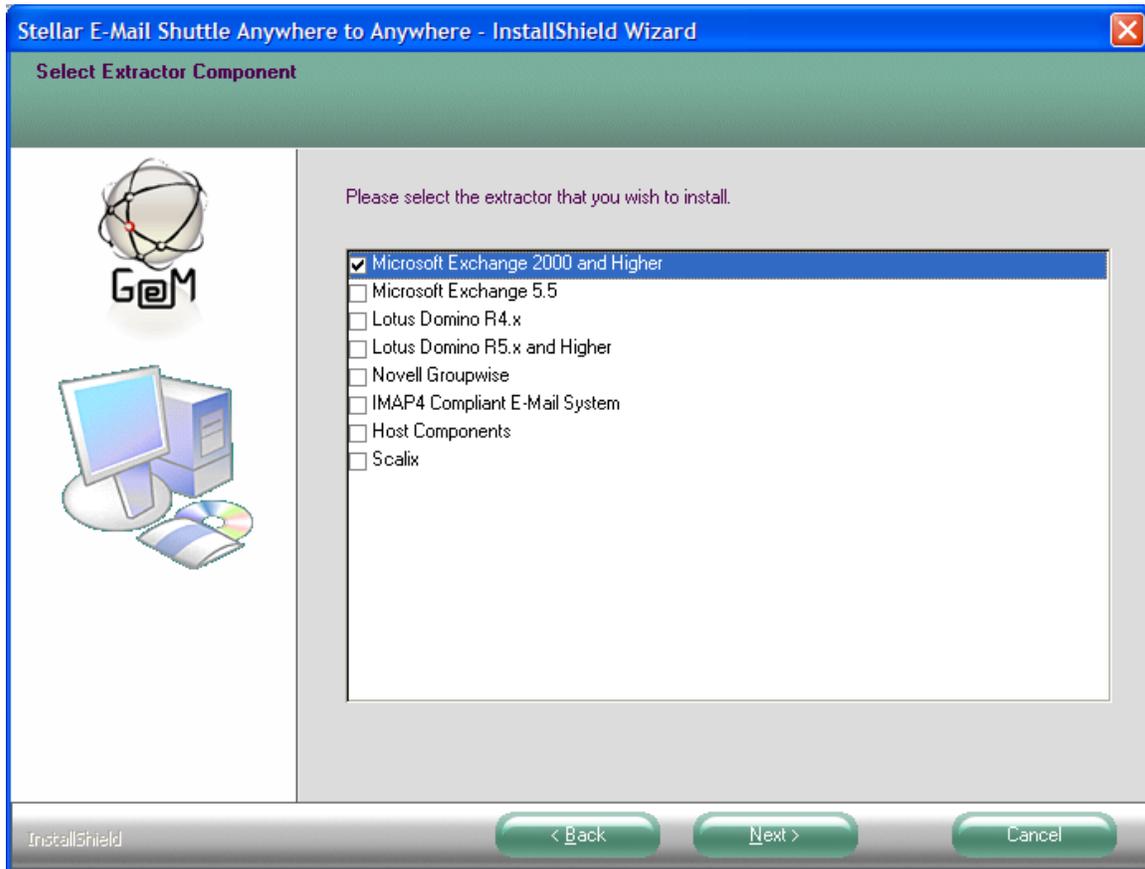
There are no prerequisites for migrating to an IMAP-4 compliant system. The Inware Email Shuttle can function properly with these minimum requirements. Depending on the volume of e-mail and the desire for increased speed and performance, the requirements can change.

## Installing the Inware Email Shuttle

First launch the setup.exe that can be downloaded from the Inware Technologies website. Follow the steps below to progress through the Wizard.

1. Welcome screen – Click “Next”.
2. License Agreement – Select agree and click “Next”.
3. Customer Information – Enter your user name, your company name and click “Next”.
4. Choose Destination Location – Choose your installation directory root level. C:\eshuttle is recommended and used throughout this documentation.
5. Select Options – Choose whether to install an extractor, a loader or both. It is strongly recommended that you install both even if you only intend on this pc doing only either extracting or loading. To install both the extractor and loader on a pc without the appropriate clients, cancel the Wizard and re-launch it from a command prompt by running: **setup.exe -nopreq**

6. Select Extractor Component – Select your source system or systems and click “Next”.



7. Select Loader Component – Select your destination system or systems and click “Next”.

8. Ready to Install the Program – Click “Install”.

## Lotus Notes Extractor Configuration

The LaunchPad interface walks system administrators through the steps of a complete e-mail migration from any e-mail system to any e-mail system and offers

context-sensitive instructions along the way.

A precursor to the LaunchPad™ is the installation of the product, described earlier.

The installation process verifies that specific prerequisites are met in order to run the product.

LaunchPad™ is intended to simplify the migration experience by predetermining much of the information needed for the migration. It currently does not reflect all the functionality of the Inware Email Shuttle. There are many advanced features that are not included in LaunchPad™. These advanced features can be configured using Mission Control.

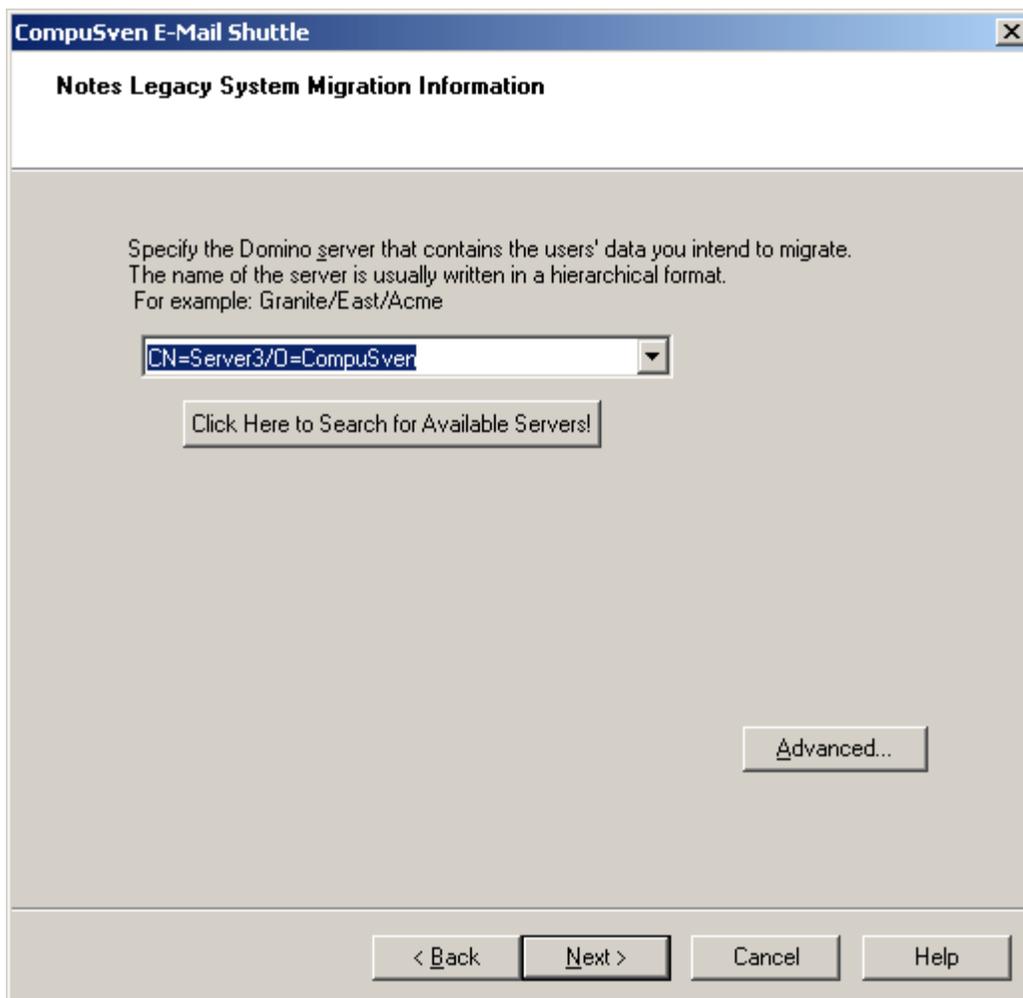
## Running the LaunchPad™

### Step 1 Migrating from Lotus Domino

When migrating from Lotus Domino to another system, LaunchPad™ simply requires that you specify the Domino server that contains the users' data that you intend to migrate. This information can be input in a hierarchical format. For example:

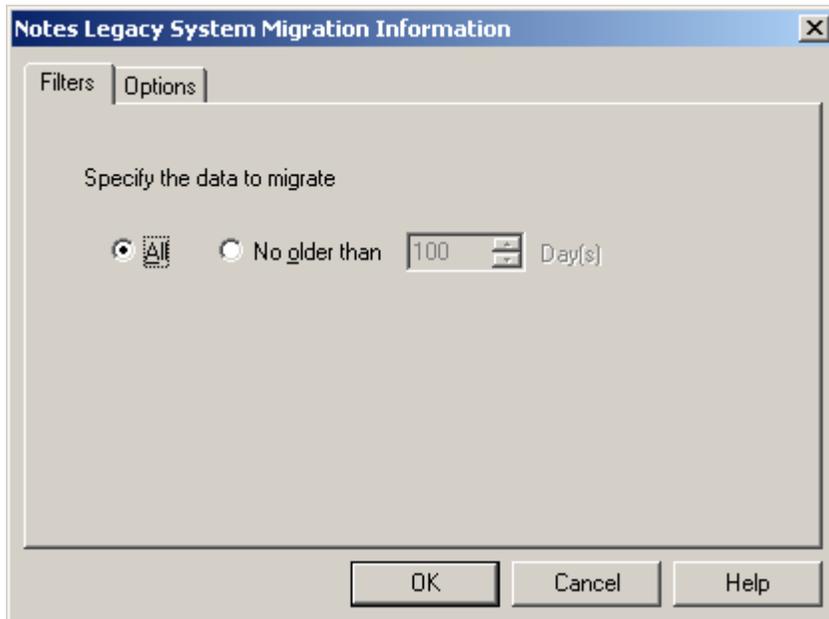
Granite/East/Acme.

This information can also be input as the IP address of the legacy Domino server. LaunchPad™ also includes a Quick Search button that will search the local PC, specifically the local Notes .ini file, for the Domino servers that are available.



### LaunchPad™ Step 1-Advanced: Filters

Some of the more common features are configurable through LaunchPad™ by selecting the “Advanced” button. Under the Filters tab, administrators can specify which data to migrate whether it is to be all the data or data within a certain range of days.

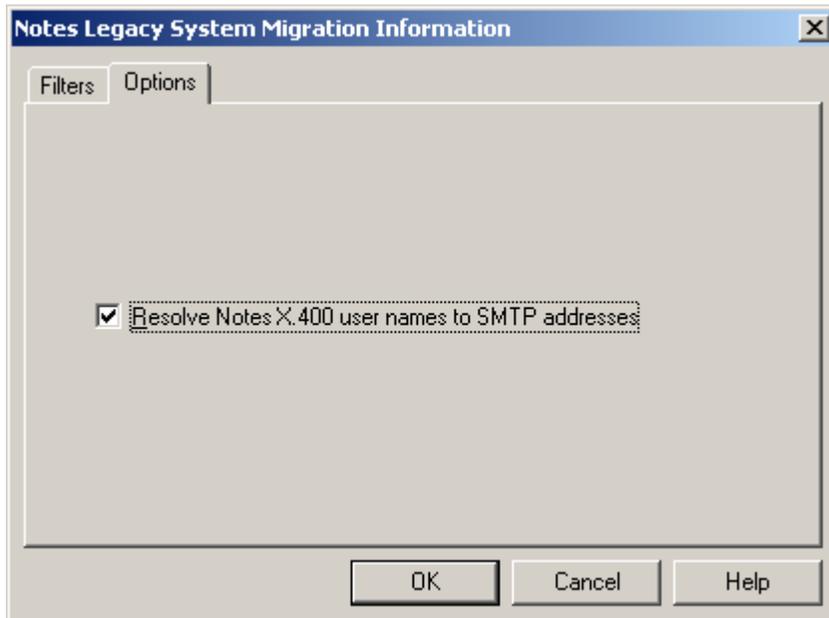


### LaunchPad™ Step 1-Advanced: Options

Under the Options tab, administrators can specify whether or not to invoke the NameStar™ technology. When checked, the SMTP addresses in the messages should be resolved from their Notes canonical names. For example:

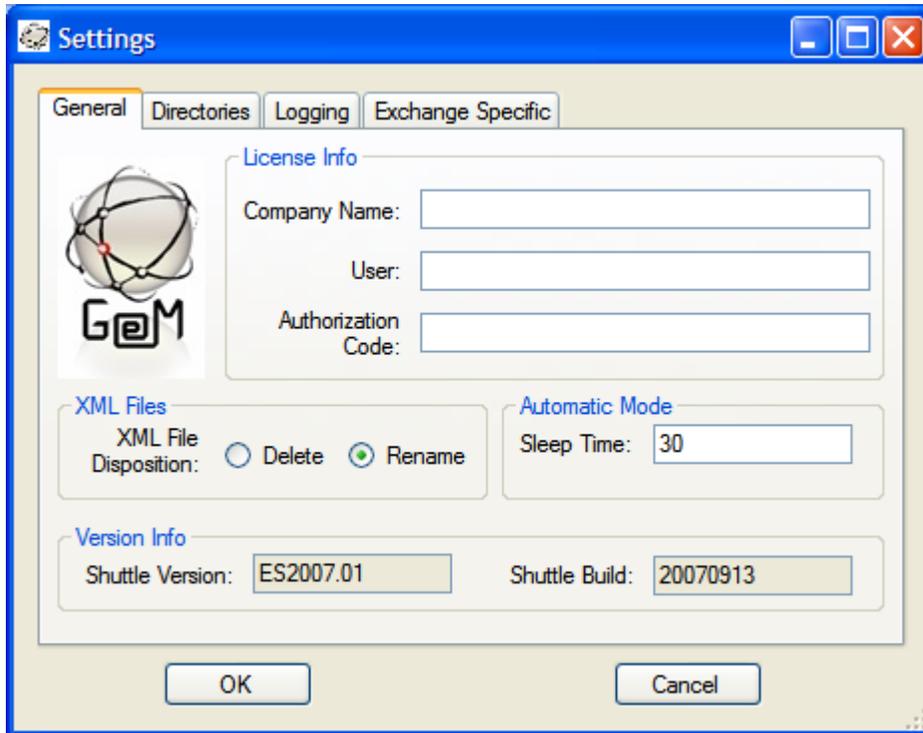
/o=MoveMyMail/ou=Site/cn=Recipients/cn=Jdoe  
will be resolved to the SMTP address of  
[John.Doe@movemymail.com](mailto:John.Doe@movemymail.com).

This will ensure and enable reply-ability when migrated to the target system and this should remain checked in most migration scenarios.



## Exchange / Office 365 Loader Configuration

The Exchange Loader can be configured by launching the ShutExIM.exe and choosing Configuration from the menu.



If you have licensed the full version of the Email Shuttle, fill in the Authorization Code as provided by Inware Technologies here. If you are evaluating the trial version of the Email Shuttle, leave this field blank. Be sure you use the correct code as the Loader code should always end with 'O'.

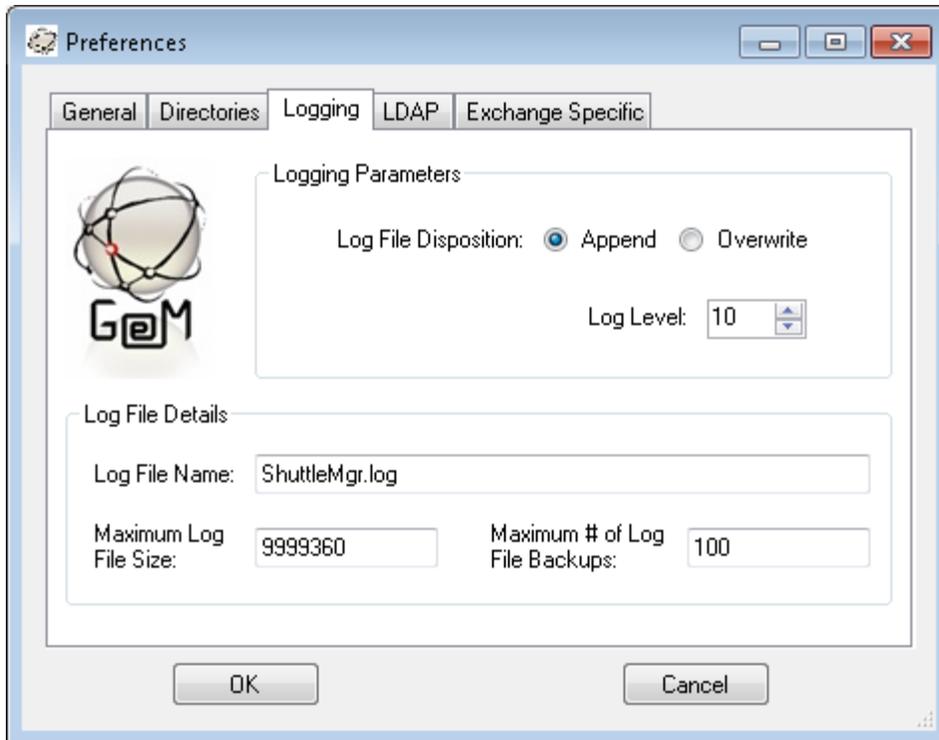
The Sleep Time specifies how long in seconds that the loader will wait before checking the bay file directories for new inbound bay files to process.

XML File Disposition indicates if you want the metadata bay files to be deleted after the loader processes them or if you would like them renamed instead.



The Content Directory should point to the Migrate directory of your Extractor. This path may differ depending on where you installed your Email Shuttle Extractor.

The Log File Directory should reflect the directory where you want to receive your loader log files.

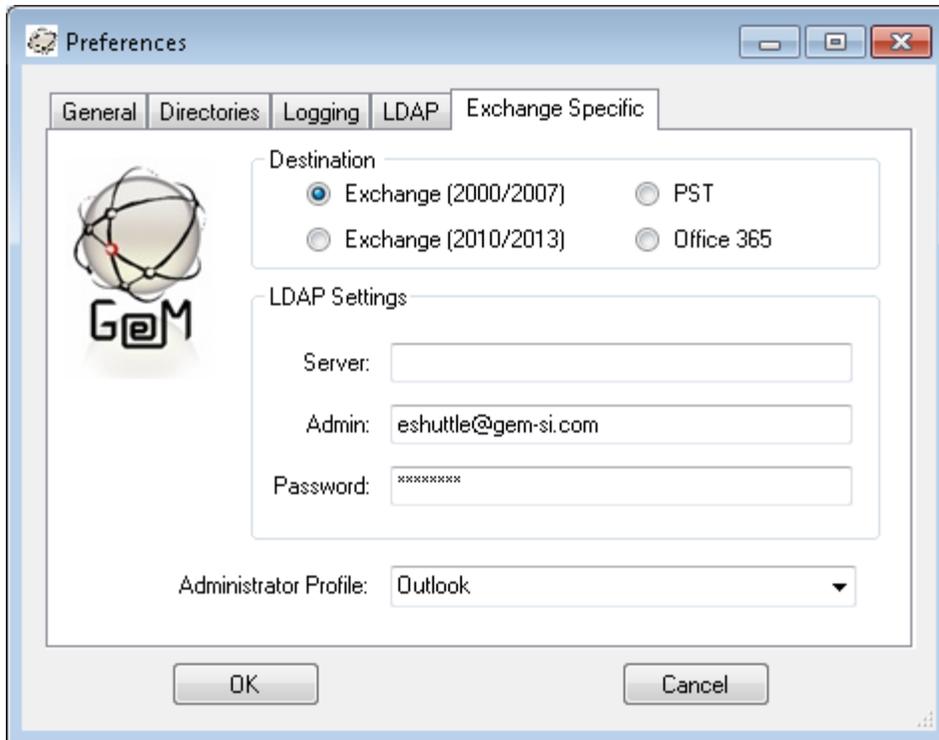


Setting the Log File Disposition to Append will cause each run of the Email Shuttle to add to the existing log where Overwrite will empty the log file for each new run.

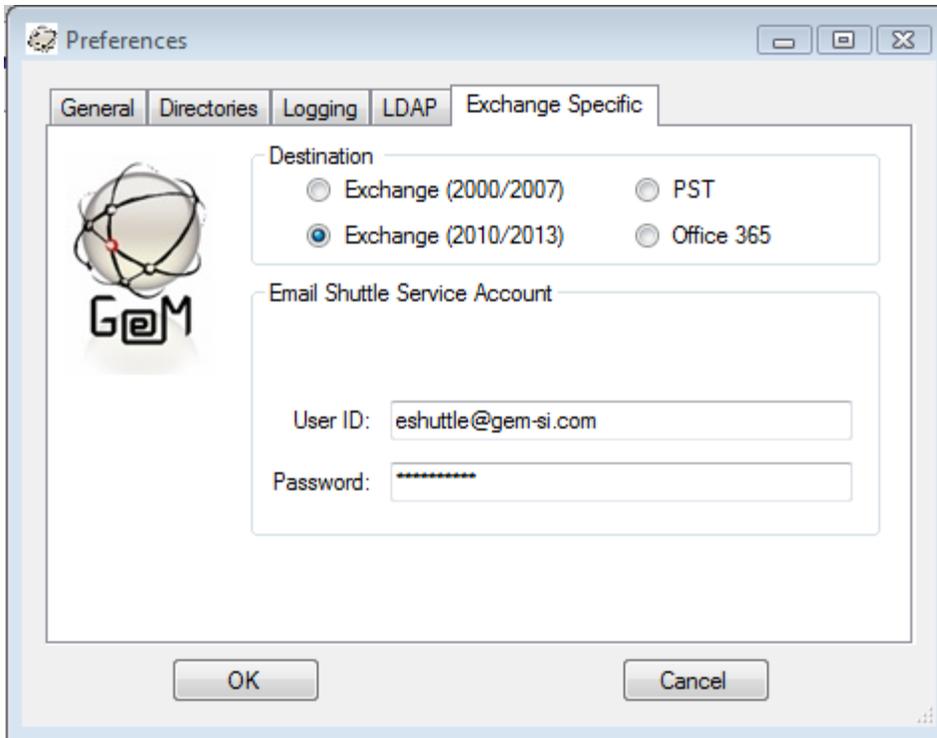
Setting the Log Level to 10 will result in the maximum logging information being captured in the log file. Setting it to 3 will result in only errors being captured. Set this value to 10 until you are sure the Email Shuttle is operating correctly.



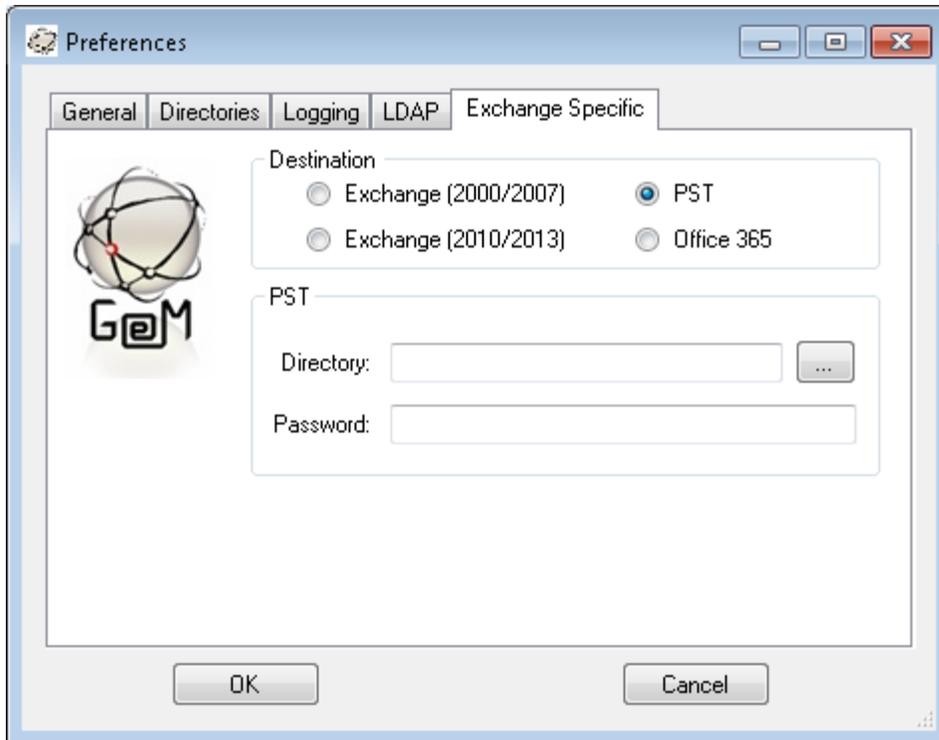
Here we will fill out the LDAP information for the Active Directory domain where your Exchange mailboxes reside. LDAP Server should be set to your Primary Domain Controller. Admin User and Password should be set to your Eshuttle administrative account. Base DN should reflect the root level of your Active Directory tree. Authentication Method should be set to as necessary for a successful LDAP bind in your environment.



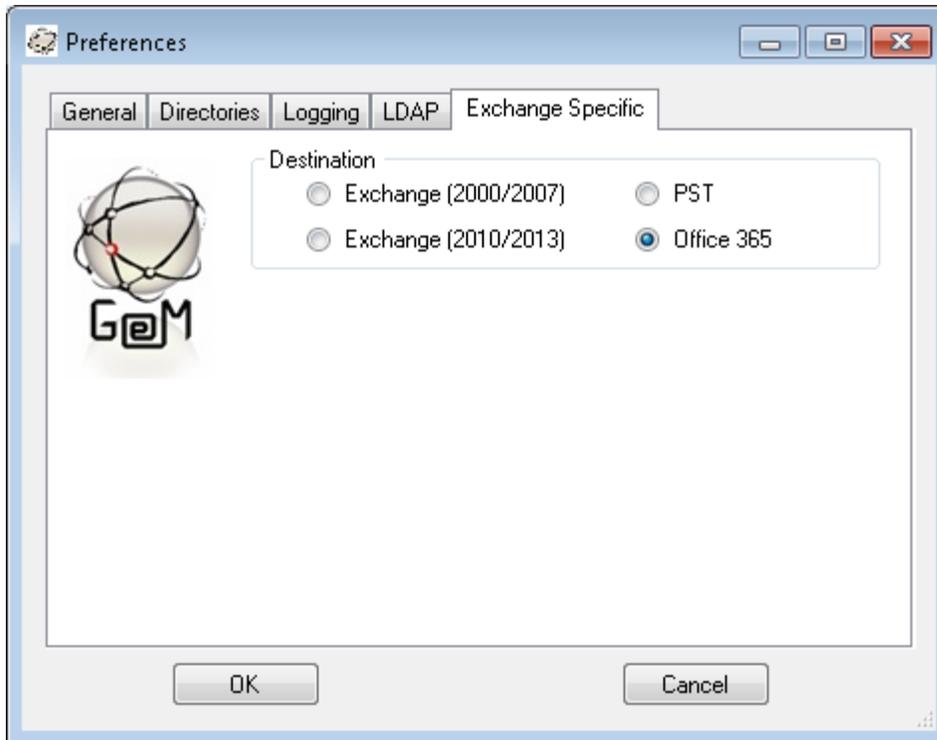
If loading into Exchange 2000 or 2007, choose this Destination option and fill in Primary Domain Controller in the Server blank, enter the email address and password of an account that has access to do an LDAP lookup into your Active Directory Environment. You will also want to create an Outlook profile that points to your Eshuttle account mailbox (that has permissions set as listed above) and set Outlook to use that profile by default in the Control Panel.



If you are loading into Exchange 2010 or 2013, choose this option and fill in the User ID and Password of the Eshuttle administrative account that was given Service Account access rights.



If you are loading into PST files, select the PST option here. Loading into PST files requires no special permissions for the Eshuttle account. The Directory specified is where the destination PST files will be created. If a Password is provided, the PST files will be created and locked by the specified password. If the Password field is left blank, the PST files will not be password protected.



If you are loading into Office 365, select the Office 365 option here. Loading into Office 365 requires no special permissions for the Eshuttle account. The user credentials will need to be specified in the destination information fields during the Migration User Selection step below.

If you are loading into a cloud based email platform other than Office 365, please install and use the IMAP Loader to complete your migration.

## Migrating to Lotus Notes

### STEP 2 Notes Target System Information

LaunchPad™ requires that you specify the Domino server that contains the directory where the users' will be migrated to. This information can be input in as a server name, an IP address or in hierarchical format. LaunchPad™ also includes a Quick Search button that will search the local PC, specifically the local Notes .ini for the Domino servers that are available. The Inware Email Shuttle will log-on to the user accounts to migrate the data requiring the path as well as the naming convention for the mail databases (.nsf files).

The screenshot shows a dialog box titled "CompuSven E-Mail Shuttle" with a close button (X) in the top right corner. The main title is "Notes Target System Information". Below the title, there is a message: "You have chosen to migrate data to a Lotus Notes target system. Provide the following Notes system information".

The first section is labeled "Specify the Domino server that you intend to migrate users to. The name of the server is usually written in a hierarchical format. For example: Granite/East/Acme". Below this text is a dropdown menu containing the text "CN=Server3/O=CompuSven". Below the dropdown is a button that says "Click Here to Search for Available Servers!".

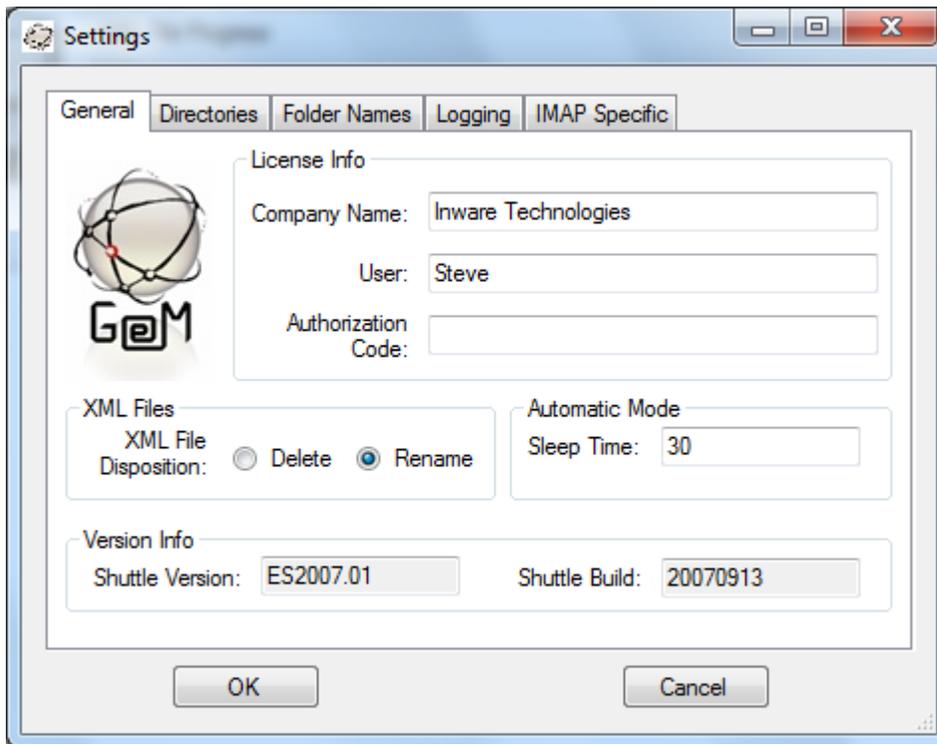
The second section is labeled "Specify the path relative to the Domino server where you intend to have users' mail database files created". Below this text is a dropdown menu containing the text "\mail".

The third section is labeled "Specify how the users' Domino account names are to be determined". Below this text is a dropdown menu containing the text "From Legacy system Account Name". To the right of this dropdown is a checkbox labeled "Other" which is currently unchecked, followed by an empty text input field.

At the bottom of the dialog box, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

## IMAP / Cloud Loader Configuration

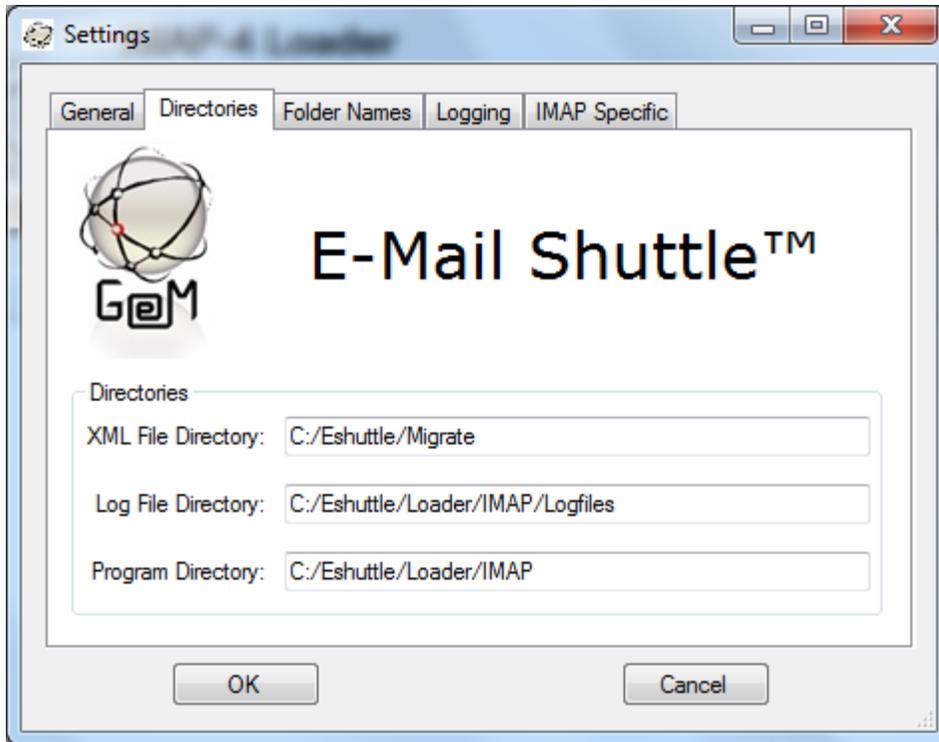
The IMAP Loader can be configured by launching the ShutImapIM.exe and choosing Configuration from the menu.



If you have licensed the full version of the Email Shuttle, fill in the Authorization Code as provided by Inware Technologies here. If you are evaluating the trial version of the Email Shuttle, leave this field blank. Be sure you use the correct code as the Loader code should always end with 'O'.

The Sleep Time specifies how long in seconds that the loader will wait before checking the bay file directories for new inbound bay files to process.

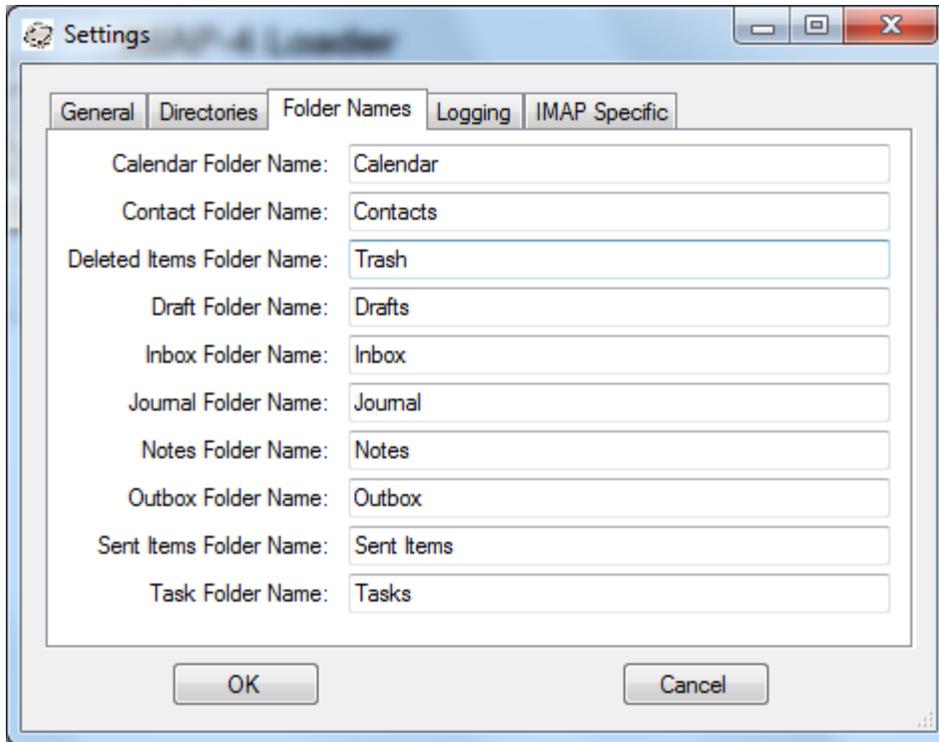
XML File Disposition indicates if you want the metadata bay files to be deleted after the loader processes them or if you would like them renamed instead.



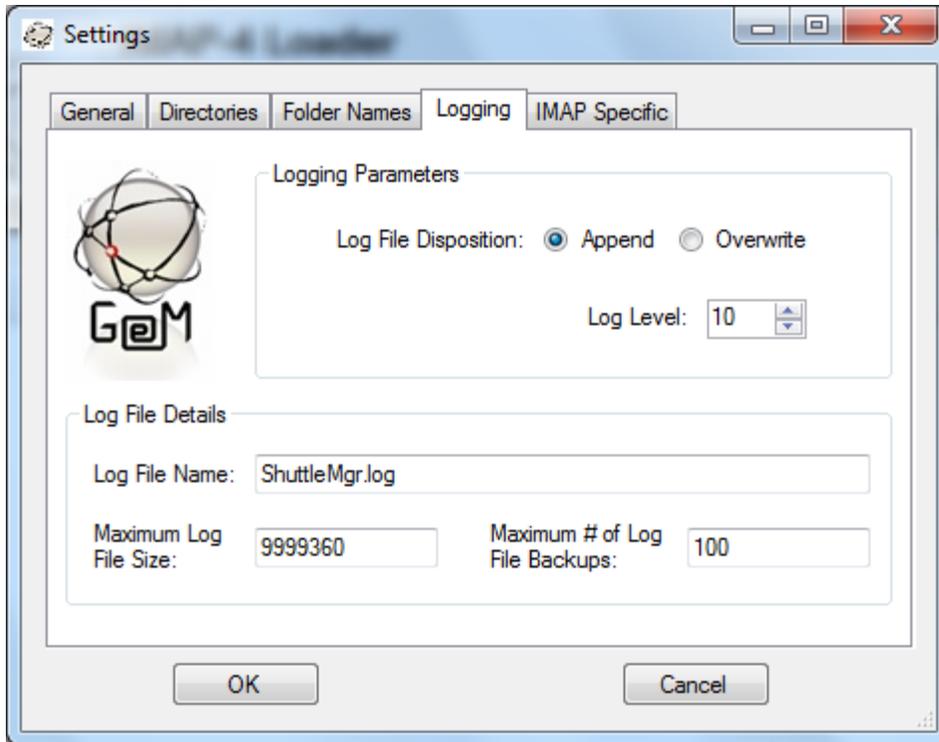
The XML File Directory should point to the Migrate directory of your Extractor. This path may differ depending on where you installed your Email Shuttle Extractor.

The Log File Directory should reflect the directory where you want to receive your loader log files.

The Program Directory should reflect the path that the Email Shuttle where the Email Shuttle IMAP Loader was installed.

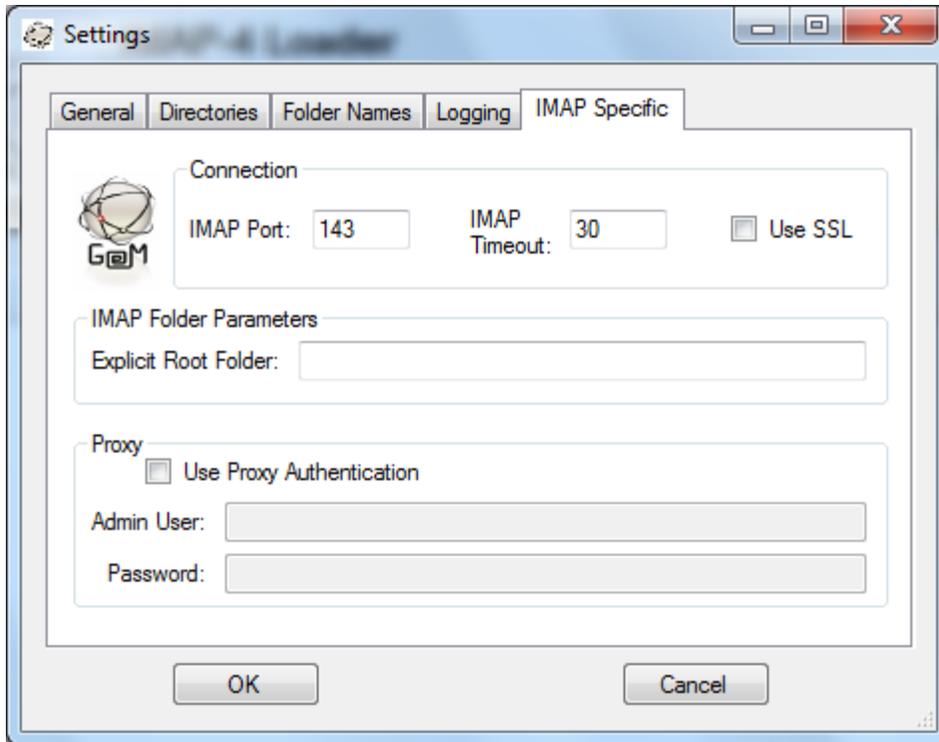


The Folder Names specified on this tab should be set to the names of the system folders for the destination email platform. These name will be used when loading data from source system folders. If after loading data into a mailbox you find that system folder data is loaded into a similar named non-system folder, then that value needs to be changed on this screen.



Setting the Log File Disposition to Append will cause each run of the Email Shuttle to add to the existing log where Overwrite will empty the log file for each new run.

Setting the Log Level to 10 will result in the maximum logging information being captured in the log file. Setting it to 3 will result in only errors being captured. Set this value to 10 until you are sure the Email Shuttle is operating correctly.



This page is reserved for specifying information on the destination IMAP server. If your destination IMAP server uses a port other than 143 or requires SSL to connect to a mailbox, specify that here.

If user created folders in your destination IMAP environment are required to be created underneath a root level, such as Inbox, specify this root level in the Explicit Root Folder area. This is typically not the case with most IMAP platforms.

If your IMAP environment allows for Proxy Administrator Authentication to open all user mailboxes, check the Use Proxy Authentication box and specify the Admin User account name and Password here. This will allow you to load data into user accounts without needing to specify their destination mailbox passwords at the time of user selection. Keep in mind that not all IMAP environments support Proxy Administrator Authentication.

## Migration User Selection

After the Extractor and Loader have been configured, Selecting a single user allows a review of the legacy and target system information. When selecting a single user, the information can be changed manually and these changes for that single user persist if multiple users are subsequently selected.

**CompuSven E-Mail Shuttle**

**Accounts to Migrate**  
Select the account(s) to be migrated

Account User Name	Account I
Alberti, Dave	DAlberti
Blanton, Scott	SBlanton
Carpenter, George	GCarpent
CompuSven,	cadminis
Delany, Tom	TDelany
Dudley, Drew	DDudley
Duncan, Denise	DDuncan
Filla, Paul	PFilla
Fitzgerald, Ken	KFitzgeral
James, Jeanne	JJames
James, Sven	Sven
Lavin, Robin	RLavin
Learn, Nancy	NLearn
Lee, Robert	RLee
Marsell, David	DMarsell

Migrating From Domino Account:

Server Name

Canonical

DB File Name

Migrating To Exchange 2000 Account:

SMTP Address

Select All    Deselect All

< Back    Next >    Cancel    Help

## Start the Migration

After specifying which users to migrate, click the Next button on the user selection screen of the Extractor to begin the migration. Then you can start the Loader by clicking on the Start button on the front screen of the Loader. The Loader should begin processing data once the first selected user has completed the extraction.

## Mailbox Verification

### Detailed mailbox verification

After migrating data for the first few users, we suggest verifying the fidelity of the mailbox data. Open up a destination mailbox and examine the mail content. Verify that the time and date on mail items are accurate, that message headers, body text and formatting are unchanged from the original messages. Also, verify that any message attachments are in place. Verify that personal folders were migrated successfully and compare the total number of messages in the source and destination mailboxes to make sure all mail was migrated.

### Broad mailbox verification

Once you are satisfied that the first few users were migrated correctly, you can proceed with bulk migrations. When migrating large groups of users, pay close attention to the disposition of the bay files after migration. Prior to being loaded, user data will be stored in files with a .bay extension. After migration, the extension will be changed to either .shu if the loader encountered no errors or .bad if the loader had errors. Any user data files that have a .bad extension after migration should be subject to detailed mailbox verification or a closer examination of the loader log file to determine what errors were encountered and what further action is necessary. Errors can represent a range of problems from a single field of one email being corrupt to not being able to access to mailbox at all. You should not assume that encountering an error necessarily required re-migrating the mailbox.

## Migration Flow Overview

Here is the general procedure for a standard production mail migration.

1. Create the destination mailboxes in Exchange.
2. Change the user mail routing for all incoming mail to flow into the users' new empty Exchange mailboxes.
3. Migrate the users' mailbox data using the Inware Email Shuttle.
4. Verify the migrated users' mailbox data.

## Extracting from Lotus NSF Files

By creating a specially formatted shuttlin file, it is possible to extract from Notes NSF files. To extract from PST files, the shuttlin file is formatted exactly like normal, except for two fields, which must contain special information:

Server: This field must be blanked out.

Database Path: This field must contain the full name and file path to the Notes NSF file.

As stated above, all other parameters are filled in normally.

*Sample of local NSF shuttlin layout*

```
ES_System^Notes^ES_Export^Callen^^^^C:\Archives\callen.nsf^callen@t  
est.compusven.com^Carol^Allen^callen^COMPUSVEN_PO^COMPUSVEN_  
DOM^DBTitle^
```

The shuttlin.txt file above will extract the data in the file callen.nsf to a BAY file formatted for loading into a Novell GroupWise mailbox, where the GroupWise UserID is “callen”, the GroupWise Post office is “COMPUSVEN\_PO”, and the GroupWise Domain is “COMPUSVEN\_DOM”.

```
ES_System^EXCHANGE^ES_Export^Callen^PST^^C:\Archives\callen.pst^  
^callen@test.compusven.com^Carol^Allen^callen^Server3\Compusven^m  
ail\callen.nsf^DBTitle^
```

The shuttlin.txt file above will extract the data in the file callen.nsf to a BAY file formatted for loading into a Lotus Domino mailbox, where the Domino UserID is “callen”, the Domino server is “Server3\Compusven”, and the Domino database file is “mail\callen.nsf”.

## Frequently Asked Questions

### Lotus Notes Extractor

**Q.** Notes Extractor cannot login to the users Notes Database.

**A.** *Make sure that the last ID file used to login to the Notes client was an administrative ID file. Also make sure the Notes Client is not open when running the shuttle.*

**Q.** Launchpad throws an error dialog box that says Launchpad is unable to find the notesusers.dll file.

**A.** *The error message is misleading. What it should say is that it cannot run the notesusers.dll because the DLL cannot find the path to the Notes Client. Make sure the path to the Notes Client directory (generally c:\Lotus\notes) is included in the environment path. This is not included in the environment path by default and may need to be added.*

**Q.** The Notes Extractor cannot extract PABs.

**A.** *Check the Notes PAB Migration.doc file for more details on the two methods of extraction PABs from Notes.*

**Q.** What is the target system server name?

**A.** *Certain aspects of the Inware Email Shuttle require the input of the legacy and target server name. Depending on the operating system, the server name can be determined in different ways.*

*For Windows NT:*

- *Right click on the My Computer icon.*
- *Select Properties.*
- *Select Identification tab.*
- *The server name is the Computer Name.*

*Using the example (see Figure 2): The Computer Name is test-server-2. The server name is test-server-2.*

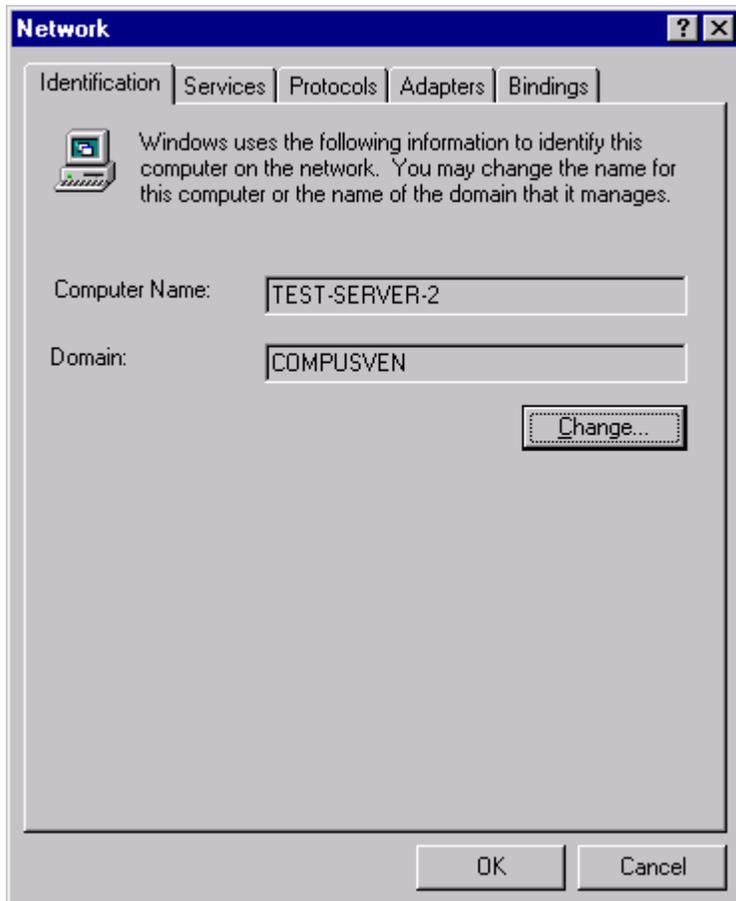


Figure 2 - Windows NT Server Name

*For Windows 2000:*

- *Right click on the My Computer icon.*
  - *Select Properties.*
  - *Select the Network Identification tab*
  - *The server name is the Full computer name excluding the Domain name.*
- Using the example below (see Figure 3):*

*Full computer name appears as: test-server-4.test.compusven.com*

*Domain name appears as: test.compusven.com*

*Server name is: test-server-4*

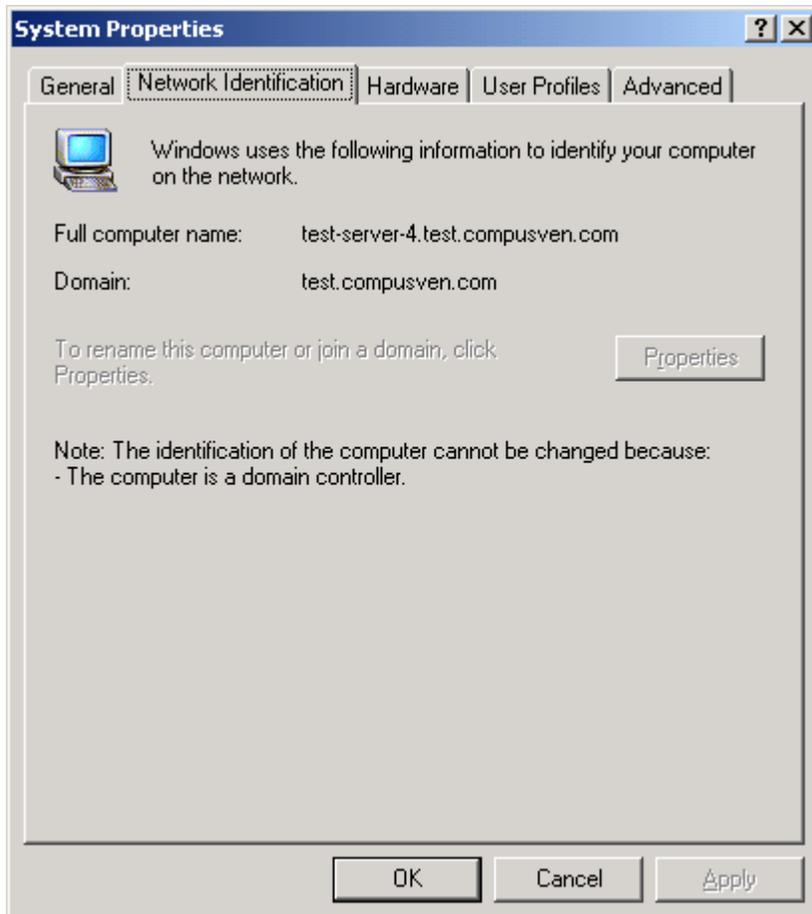


Figure 3 - Windows 2000 Server Name

**Q.** What is the Server Name of the Legacy Notes Server?

**A.**

**1. Open a Lotus Notes client connected to the legacy Lotus Notes server.**

**2. Select File**

**3. Select Database**

**4. Select Open**

**5. Scroll through the dropdown menu to identify the legacy server name. (as appears in Figure 4)**

**6. The name for the legacy Lotus Notes server would appear as i.e. "Server3/CompuSven".**

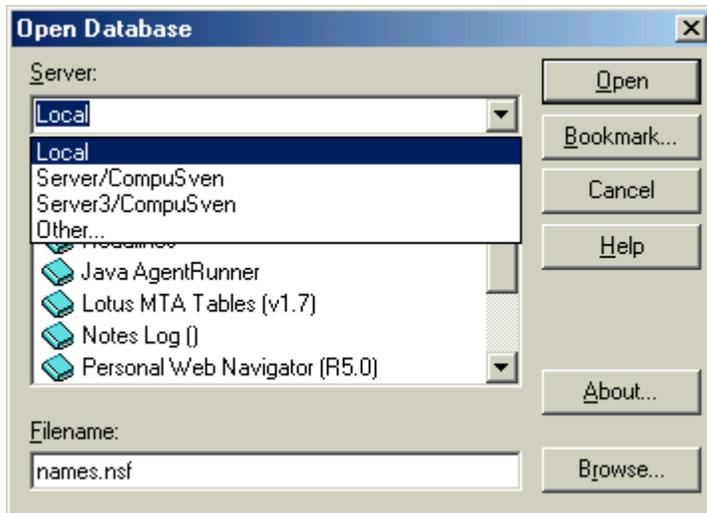


Figure 4 – Open Database

**Q.** Certain .DLLs are not being located by my system, how can I fix them?

**A.** *The Inware Email Shuttle is looking for .DLLs in the directory or path of your Lotus Notes or Domino Server software. During the install of the product, you provided information that was written to the path of the system. Be certain that this information is correct by: At the DOS prompt (for example, "C:\"), type path and press Enter. The path for the Notes or Domino server should appear in the display. For example on the Domino Server, the default path is "C:\Lotus\Domino\". For a dedicated migration server running the Notes R5 client, the default path is "C:\LotusNotes\".*

**Q.** I'm getting a warning message in the log files regarding Recurring Events, that does this mean?

**A.** *If no recognized pattern of relationships is found after processing the recurrence dates, the calendar event is assumed to be a "custom" recurring event. In this case, individual calendar entries that have been created from the set of recurrence dates on hand for the event being processed are exported to the current bay file. In addition, the following warnings are logged into the log file:*

*"WARNING - Unable to determine the recurrence pattern for this event."  
"WARNING - This recurring event will be converted into individual calendar entries."*

*In the (hopefully rare) case where a Lotus Notes calendar event is marked as recurring, but the code cannot retrieve a set of "recurrence dates" for the event, it is extracted as a regular non-recurring event, and the following warnings are logged into the log file:*

*"WARNING - Item marked as recurring, but no recurrence dates found."  
"WARNING - Item being processed as a regular calendar entry."*

*The Lotus Notes C++ API provides only minimal support for recurring calendar events. In order to implement support for recurring calendar events in the Lotus Notes Mail Extractor software, it was necessary to analyze a series of "recurrence dates" that are returned by the Lotus Notes C++ API, and from that analysis, attempt to deduce what type of recurring pattern the original Lotus Notes calendar event was created with.*

*The Lotus Notes Mail Extractor software currently supports all of the basic types of recurring calendar events. These are: daily, weekly, monthly by date (i.e. each month on the 12th), monthly by a specified day of the week (i.e. each month on the 2nd Wednesday), and yearly. It also supports recurrences such as every other day, every 5th day, every 4th month, the 1st Friday of every 5th month, every 7th year, etc. If a pattern cannot be deduced for the recurring calendar event, individual calendar entries are exported to the bay file for each recurrence date of the event, and a warning is logged.*

*If an event is marked as being recurring, but no recurrence dates are found, the event is exported as a non-recurring calendar entry, and a warning is logged.*

*Additional recurrence patterns may be supported in the future.*

## **Microsoft Exchange Loader**

**Q.** The Exchange Loader loads mail, but not calendar and a login popup window is displayed when the Calendar Loader is run.

**A.** *The user is most likely not logged on as the Eshuttle user or the Eshuttle user is not a member of the correct domain or the Exchange Domain Servers group. The different data types use different APIs to access the mailboxes so it is possible for mail to work correctly and calendar to have insufficient access rights.*

**Q.** The Loader is unable to login to mailboxes.

**A.** *Make sure you are logged into Windows as the Eshuttle user created above. Make sure that the Eshuttle user is a member of the correct group and is also a member of the same domain as the destination mailboxes.*

**Q.** The Loader is unable to login under Exchange 2003

*A. See the KB article below on setting correct rights for 2003. This can sometimes involve more than just setting the user in the Exchange Domain Servers group.*

**Q.** When running under Exchange 2003, the Mail Loader loads for a while, then starts throwing error messages regarding active mail.

*A. Consult the Microsoft KB article*

*<http://support.microsoft.com/default.aspx?scid=kb;en-us;830836> for increasing the default mail and folder quantity limits in Exchange 2003.*

**Q.** When loading mail into PST files, the Mail Loader loads mail for a while, then stops.

*A. Outlook 2000 has a 2 GB limit that might only allow for some of the data to be loaded when the bay file is larger than 2 GB. Outlook 2003 has no such size limit and can be used to circumvent this issue.*

**Q.** When loading mail into PST files, the PST files are not being created.

*A. Make sure you aren't running the Inware Email Shuttle on the Exchange server or on a Windows server OS. These operating systems have documented problems with PST file creation.*

**Q.** The Loader is unable to login and the GroupWise mail client is on the machine.

*A. You may have to split the GroupWise Extractor and Exchange Loader onto two separate machines. To do this, copy the Eshuttle directory onto a machine without GroupWise and use it for your loader machine. You will have to map a drive to the new machine from the loader machine and set the bay file directories to the new machine in order to run the extractor and loader simultaneously. If GroupWise is not part of your migration, this problem can be fixed by uninstalling both the GroupWise mail client and Outlook and then reinstalling Outlook.*

## **Notes Loader**

**Q.** The Notes Loader cannot login to the users Notes Database.

*A. Make sure that the last ID file used to login to the Notes client was an administrative ID file. Also make sure the Notes Client is not open when running the shuttle.*

**Q.** Certain .DLLs are not being located by my system, how can I fix them?

*A. The Inware Email Shuttle is looking for .DLLs in the directory or path of your Lotus Notes or Domino Server software. During the install of the product, you provided information that was written to the path of the system. Be certain that this information is correct by: At the DOS prompt*

*(for example, "C:\"), type path and press Enter. The path for the Notes or Domino server should appear in the display. For example on the Domino Server, the default path is "C:\Lotus\Domino\". For a dedicated migration server running the Notes R5 client, the default path is "C:\LotusNotes\".*

## **IMAP-4 Loader**

**Q.** How can I configure multiple instances of the Inware Email Shuttle to run simultaneously?

**A.** *Copy the distribution into unique directories on the migration server. Each directory should contain the executable files as well as the distinct configuration files for that migration instance.*

*Be aware that running multiple copies of the Inware Email Shuttle on a single PC will generally not help throughput due to bandwidth restrictions on a single NIC card.*