



## E-Mail Shuttle

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E-Mail Migration & Directory Synchronization

## Product Overview

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Inware Technologies, Inc.

# E-Mail Shuttle

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## An Industrial Strength, Anywhere to Anywhere Email Migration Solution

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## Overview

E-Mail Shuttle is an industrial strength migration software solution specifically designed to migrate data for the corporate enterprise. The E-Mail Shuttle was designed with pure performance and data fidelity at the core. More than a migration wizard, Inware's E-Mail Shuttle provides the real-world solution for managing enterprise migrations. In the most general terms, the E-Mail Shuttle treats a migration as two processes - migrating from a legacy e-mail system and migrating to the target e-mail system. The E-Mail Shuttle has a corresponding component for each of these two parts - an Extractor to perform the migration from the legacy systems and a Loader to perform the migration to the target system. E-Mail Shuttle was designed specifically for the needs of companies managing massive migrations regardless the number of disparate legacy systems being migrated.

## Compatibility

The E-Mail Shuttle's design provides the ability to migrate data from any legacy e-mail system to any target environment. E-Mail Shuttle also does not rely on connectors, including the Active Directory Connector, so the migration can be managed running in either mixed-mode or native-mode. Inware's E-Mail Shuttle is the most efficient solution to provide data migration from virtually any e-mail system with complete data fidelity.



## Performance

The E-Mail Shuttle has the ability to migrate data at least 4 to 11 times faster than the Wizard. The architecture makes the speed and performance of a migration virtually boundless. By running multiple instances of the application, E-Mail Shuttle will migrate the data at a rate consistent with the physical limits of the network connections. Multiple copies of the Data Extractor and Data Loader can be run simultaneously to shorten the timeframe for migration. Also, the Active Directory Connector and other proprietary connectors are not prerequisites of the E-Mail Shuttle, therefore, speed of the migration is not limited by their bounds.

## Complete Data Fidelity

E-Mail Shuttle migrates the most common data elements including inboxes, file folders, calendars, personal contacts, and directories. It can also migrate data types and attributes of the data elements that may be essential to your business that the Migration Wizard and other migration tools neglect to migrate. The E-Mail Shuttle migrates attributes including read/unread marks, sensitivity and priority flags, categories, free/busy, reply-addresses, HTML, and Rich Text Format (RTF), etc.

## Data Types Migrated to Target System

E-Mail Shuttle is an enterprise-quality migration product that migrates the following data elements shown in the chart below. Where applicable the E-Mail Shuttle can synchronize mail lists.

Legacy Systems Migrating From	Data Migrated									
	inboxes or mailboxes	personal folders	attachments	calendar	personal contacts	public data or folders	directory	public maillists	forms	
from EXCHANGE 5.5 or greater	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	
from NOTES/DOMINO 4.x or greater	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	● <sup>a</sup>	●●●●●	●●●●●	●●●●●	
from GROUPWISE 5.2 or greater	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●		●●●●●	●●●●●	●●●●●	
from Fischer TAO	●●●●●	●●●●●	●●●●●	●●		● <sup>b</sup>	●●●●●	●●●●●	●●●●●	● <sup>d</sup>
from IMAP4 Compliant	●●●●●	●●●●●	●●●●●	N/A	N/A		●●●●● <sup>e</sup>	N/A	●●●●●	
from ORACLE Collaboration Suite	●●●●●	●●●●●	●●●●●				●●●●●			
from Sun ONE	●●●●●	●●●●●	●●●●●				●●●●●			
from HP OpenMail	●●●●●	●●●●●	●●●●●				●●●●●			

**LEGEND**  
migrating to target system

- Exchange 5.5 or greater
- Notes/Domino 4.x or greater
- GroupWise 5.2 or greater
- Scalix 9.1 or greater
- IMAP4 system

<sup>a</sup> Letters and attachments stored in Domino Discussion databases (databases created and consistent with "Discussion Notes & Web (R4.x and R5.x) .ntf files").

<sup>b</sup> For purposes of this discussion, Public Data for TAO are defined as bulletin boards & conferences.

<sup>c</sup> TAO GUI attachments

<sup>d</sup> HTML forms

<sup>e</sup> Only applicable if IMAP4 system supports LDAP

## Inware DirSync™

The E-Mail Shuttle Directory Synchronization™ (DirSync) provides enterprise quality two-way directory synchronization with such e-mail systems as Lotus Domino, Novell GroupWise, Microsoft Exchange, and LDAP2 and LDAP3-compliant directories as well as others. DirSync performs a point-to-point synchronization leading to a two-step process for each e-mail system. This point-to-point architecture eliminates the need to declare a "master" and "slave" relationship between the directories. Inware designed this architecture so that each local directory is an authority on its local IDs. Once a change is detected on the local system, it is then propagated out to the systems of which it is connected. This process ensures that when local administrators make changes to an ID, that any change (address or phone number) is updated on the system(s) that it is connected to. It also drives "migrations" of users from the system to which the user is being migrated. Once a user is made a local user, the directory synchronization process will then update the remote system to indicate the new forwarding address so that as users move, their mail is automatically forwarded to them. E-Mail Shuttle allows companies to synchronize large, enterprise directories equally well with or without the existence of a meta-directory and with or without connectors.

Furthermore, the E-Mail Shuttle requires no connectors, but instead relies on simple file transfers, such as a mapped network drive or FTP to synchronize the data. The synchronization process begins with the E-Mail Shuttle extracting entries from the legacy system. These entries are then loaded into the target system as foreign users. Next, the target directory entries are extracted and loaded into the legacy system. Running as a scheduled task, the Shuttle performs the steps necessary to do the extract from the directory and determines the deltas (adds, modifies, and deletes) to be sent to the target system in order to update or synchronize the directory. The point-to-point architecture ensures that the entries foreign to the system are managed or owned by that foreign system; add, modifies and deletes of entries can only be initiated by the native system for that entry.

## **Scalable Architecture**

E-Mail Shuttle works independent of connectors, handles data on systems that are remote and disparate from the native system, and integrates with your legacy e-mail system whether migrating from Microsoft Exchange, Lotus Notes/Domino, Novell GroupWise, Fischer TAO, or any IMAP4-compliant system. In addition to the cross-platform compatibility, Inware's E-Mail Shuttle provides for your unique requirements including allowing the migration of only certain data types for certain users. The E-Mail Shuttle can be run as multiple instances to enable an administrator to centrally manage the migration of several e-mail systems, whether a single user, a group of users or the entire company, to the target environment.

The E-Mail Shuttle Extractor extracts data from a myriad of disparate e-mail systems and creates Bay Files. These Bay Files are unique to each user and data type migrated. For example, a single bay file contains all calendar entries for user John Doe and another bay file contains all inboxes and file folders for John Doe. John Doe's calendar entries, inboxes and file folders are loaded into the target e-mail system.

The E-Mail Shuttle migrates e-mail data from server to server. The main components are the Data Extractor and the Data Loader. The Data Extractor can be used for all users collectively, or may be deployed for a single user or a group of users, i.e., department, location, etc. It can extract specified data, i.e., mailboxes, or multiple types of specified data. Installed on Microsoft Windows PC with a legacy email "client" and target email "client," it has the ability to extract data from any connected legacy email Server. The Data Loader is an application that automatically loads the migrated data into the target email server.

## **Automated and Integrated**

The E-Mail Shuttle can be configured to run as an automated service, to run on queue or to run from a command line kickoff. By defining the users for migration, the E-Mail Shuttle can manage the migration of users without the need for end-user or support team intervention. Once defined, users can be migrated by the E-Mail Shuttle on a schedule consistent with the migration plan. In addition, the ability to run the E-Mail Shuttle from a command line kickoff allows enterprises to integrate the migration process into existing workflow applications.

## **Industrial Strength**

The E-Mail Shuttle's performance, data fidelity, and architecture is responsible for the migration of millions of mailboxes and hundreds of Fortune 1000 companies to their target systems.

## Reply-ability: Replying to Messages after Migration

Inware's NameStar™ technology provides consistent accurate translation of addresses in headers, calendars and groups to ensure that all migrated data is fully reply-able and resolved to the Directory object. This also provides the ability to change domain name during the migration – an excellent way to manage mergers and acquisitions. Inware Technologies, Inc. mandated the ability for all data conversion, such as name resolution (used to build valid reply-to addresses), and the location of the user on the target e-mail system to be collected at the originating system and then pushed to E-Mail Shuttle on the target system. This was done specifically to speed the performance of the migration and to ensure that the legacy system was used to create the cross-reference name files in order to properly load mail into the target system.

## 24x7 Customer Support

Inware Technologies, Inc. provides premier 24 x 7 support for the E-Mail Shuttle. Upon purchase of the product, the our support staff will be available to resolve any issues related to the E-Mail Shuttle during the migration process. Inware Technologies, Inc.'s success has attracted a development staff that not only develops the products, but also participates in supporting the products with the aim of further understanding and improving the customer experience.

## E-Mail Shuttle Features

- E-Mail Shuttle architecture consists of an Extractor, which extracts data into a meta file, then transfers the meta file to an E-Mail Shuttle Loader. Each Extractor and Loader can be run on one machine, or has the flexibility to extract data locally at one location, and then transfer the files to the Loader at another location.
- The E-Mail Shuttle supports the migration of more legacy e-mail systems than any other product on the market. The E-Mail Shuttle can migrate data from legacy systems such as TAO, HP OpenMail, Notes/Domino, Exchange or any IMAP4-compliant system.
- E-Mail Shuttle migrates data at least 4 to 11 times faster than other tools and in fact is virtually boundless when it comes to speed.
- Multiple instances of the E-Mail Shuttle can run simultaneously providing scalability for managing multiple migration projects.
- Because E-Mail Shuttle does not rely on proprietary connectors including the Active Directory Connector (ADC), it can run in either mixed-mode or native-mode.
- One Loader for multiple Extractors from multiple disparate email products. This architecture provides a unified interface for centrally managing large migration projects regardless of the legacy environment.
- The E-Mail Shuttle architecture offers an administrator the flexibility to migrate only certain data elements with select users. For example, if there was not a requirement to migrate calendar data for the Human Resources Department, but this data was required to be migrated for the offices of the Executive staff, E-Mail Shuttle provides the administrator this option.

- The E-Mail Shuttle manages migrations from server to server; thus, eliminating the need for end-user intervention during the migration process.
- 24 x 7 vendor-provided support for customers.
- The Shuttle integrates with standard file transfer mechanism to migrate the data including a network drive, FTP, and HTTP.
- Fidelity of data types is preserved including attachments, RTF, HTML, free/busy, priority and sensitivity flags, categories, read/unread marks and others.
- NameStar™ technology provides consistent accurate translation of addresses in headers, calendars and groups to ensure that all migrated data is fully reply-able and resolved to the Directory object. This also provides the ability to change domain name during the migration – an excellent way to manage mergers and acquisitions. Reply-ability is maintained without having to migrate legacy entries from Directory.
- Command line kickoff allows for easy integration to enterprise processes.
- Batch mode or GUI interface allows easy queuing or scheduling of users to be migrated. From a couple of hundred users per day to thousands of users per day.
- Selecting users for migration can be done from the legacy system or target system.
- E-Mail Shuttle log file output can be tailored to integrate with existing project management consoles or workflow applications.