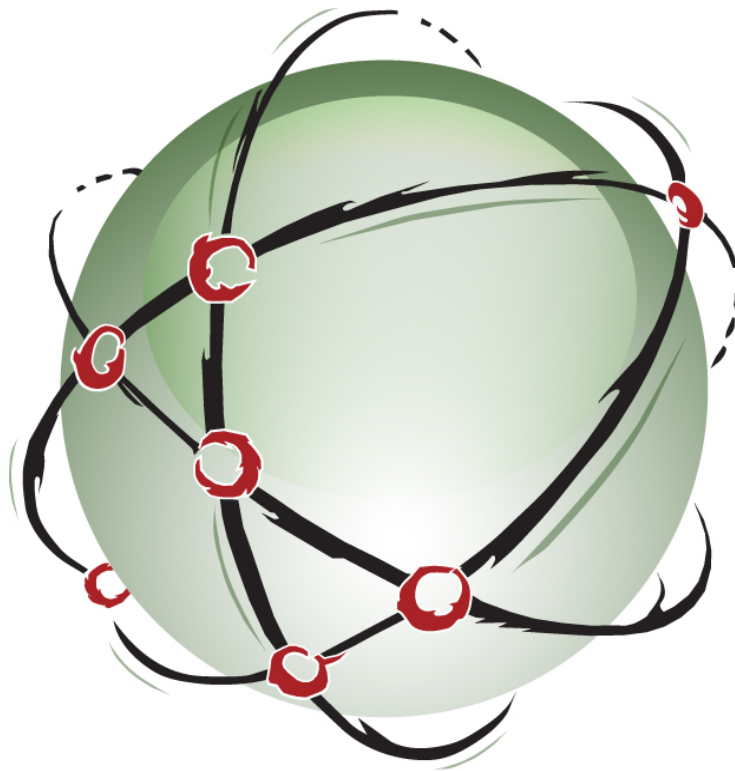


Inware Technologies Inc.

DirSync™

E-Mail Shuttle™ LDAP Directory Synchronization



Inware

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System Requirements

DirSync™ must be installed along with the E-Mail Shuttle™ from Inware. Please see the corresponding E-Mail Shuttle User Guide for system requirements and installation instructions.

Overview

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 works in conjunction with the E-Mail Shuttle to extract users' directory entries from the legacy systems and insure that they are accurately reflected in the target system directory.

Theory of Operation

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 to 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) to which it is connected. 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.

Installing LDAP DirSync™

DirSync™ can be installed by unzipping the file “LDAPDirSync.zip” to a directory on the E-Mail Shuttle server. This will install the main DirSync tasks and a sample configuration file.

Configuring DirSync™

Once DirSync™ is installed on your E-Mail Shuttle server, you will need to configure DirSync. The file “ESHUTTLE.INI” that was created during the installation contains the parameters that will need to be set prior to running DirSync. Please see *Appendix A. ESHUTTLE.INI Configuration Parameters* for an explanation of the parameters and acceptable values for them. The configuration for DirSync is typically done using a text editor such as notepad. Use the appendix to help determine the optimum values for your LDAP environment. Be aware that a working knowledge of the names of your existing LDAP attributes will be necessary to use the Mapping features of LDAP DirSync™.

Running DirSync™ LDAP Directory Synchronization

After DirSync™ has been installed and configured, the directory synchronization may be run as a two step process for each email system. First, entries from the legacy email system are extracted. These entries are then loaded into the target email system as foreign users. Next, the target email users are extracted and loaded into the legacy email system.

Directory Loader – SHUTDDIM.EXE

The Directory Loader takes users stored in the E-Mail Shuttle bay file format and converts them into users in the LDAP directory. The program uses mapping rules stored in the eshuttle.ini file and loads them into the attributes specified. The ini file also allows for 5 required fields and their static values. See Appendix A for the layout of the eshuttle.ini file to determine mapping rules and other parameters required to create users in the destination mail system.

Directory Extractor – SHUTDDR.XE

Extracting users from a generic LDAP system into the foreign email system is completed using the executable SHUTDDR.XE. When executed, the E-Mail Shuttle Directory Extractor takes users specified in as many as 5 containers and loads them into an extract file. This file can then be run with our delta determination program to create bay files. The users are exported using the field mapping rules found in the eshuttle.ini file.

Additional Support Information

If you have any technical questions, please contact shuttlesupport@InwareTechnologies.com or call 407.323.9616.

If you have questions on the licensing of any existing features or feature you need to add, please contact sales@InwareTechnologies.com or call 239.592.1816.

Appendix A. ESHUTTLE.INI Configuration Parameters

Parameter	Sample	Description
[LDAP]		
AuthorizationCode		Supplied by Inware, if empty, the program will extract only 10 users to the extract file.
Server	0.0.0.0	The IP address or DNS name of the LDAP server.
LDAPUser	Administrator	
LDAPPassword	password	
DirSyncDir		The directory the E-Mail Shuttle™ is to use to create the extract file.
LogFileDir		The directory the E-Mail Shuttle™ is to use to update or create the log file.
ProgramMode	0	0 – run in normal mode; 1 – run in debug mode
[LDAPExtract]		
UseContainer1	1	Indicates whether to use this container. 1 – yes; 0 - no
ContainerName1	cn=users,dc=company,dc=com	Container name or base DN to perform the search against.
Query1	(objectClass=*)	Determines what users will be extracted for the loading into the target system.
UseContainer2		
ContainerName2		
Query2		
UseContainer3		
ContainerName3		
Query3		
UseContainer4		
ContainerName4		
Query4		
UseContainer5		
ContainerName5		

Query5		
HostVersion	ES2001.00	The version of the E-Mail Shuttle™ running on the target email system.
SHUTDDRVersion	ES2001.00	Read only field. The application updates this value.
SHUTDDRBuild	0410	Read only field. The application updates this value.
[ExportMappingRules]		
Alias		Bay file stores as a 20 byte field. Used for keying on the target system this record. Should uniquely identify the legacy user on the target system
MailID		Bay file stores as a 40 byte field
Department		Bay file stores as a 30 byte field
Title		Bay file stores as a 30 byte field
Address1		Bay file stores as a 44 byte field
Address2		Bay file stores as a 44 byte field
Address3		Bay file stores as a 44 byte field
Address4		Bay file stores as a 44 byte field
Address5		Bay file stores as a 44 byte field
Address6		Bay file stores as a 44 byte field
Address7		Bay file stores as a 44 byte field
Address8		Bay file stores as a 44 byte field
BusinessPhone		Bay file stores as a 44 byte field
FaxPhone		Bay file stores as a 44 byte field
CellularPhone		Bay file stores as a 44 byte field
FirstName		Bay file stores as a 40 byte field
MiddleInitial		Bay file stores as a 5 byte field
LastName		Bay file stores as a 40 byte field
GenerationQualifier		Bay file stores as a 3 byte field
DistinguishedName		Bay file stores as a 256 byte field. Used to identify how the user is distinguished on the legacy email system.
SMTPAddress		Bay file stores as a 100 byte field. The SMTP address of the legacy user.

[LDAPLoad]		
DistinguishedNamePrefix		Used when building the distinguished name for the foreign entry on the target system. The distinguished name is built using prefix, alias, and then host container.
DisplayName	0	Format of the display name to be built. 0 – first, last 1 – first last 2 – first.last 3 – last.first 4 – last, first middle 5 – first.middle.last
DirSyncNameSuffix		
DirSyncDomain		
DirSyncDir		
HostContainer		
HostVersion		
ShuttleVersion		
ShuttleBuild		
[LoadMappingRules]		
Alias		Bay file stores as a 20 byte field. Used for keying on the target system this record. Should uniquely identify the legacy user on the target system
MailID		Bay file stores as a 40 byte field
Department		Bay file stores as a 30 byte field
Title		Bay file stores as a 30 byte field
Address1		Bay file stores as a 44 byte field
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LastName		Bay file stores as a 40 byte field
GenerationQualifier		Bay file stores as a 3 byte field
LastName		Bay file stores as a 40 byte field
SMTPDomain		
Required1Field	objectClass	In order to create on entry on the target system, certain fields are required to be set to a set value. This is the field name for the field.
Required1Value	user	Value to be used to set the required field.
Required2Field	userPassword	In order to create on entry on the target system, certain fields are required to be set to a set value. This is the field name for the field.
Required2Value	password	Value to be used to set the required field.
Required3Field		In order to create on entry on the target system, certain fields are required to be set to a set value. This is the field name for the field.
Required3Value		Value to be used to set the required field.
Required4Field		In order to create on entry on the target system, certain fields are required to be set to a set value. This is the field name for the field.
Required4Value		Value to be used to set the required field.
Required5Field		In order to create on entry on the target system, certain fields are required to be set to a set value. This is the field name for the field.

Required5Value		Value to be used to set the required field.
SMTPAddress		The field name of the local SMTP address of the foreign user on the target system.
SMTPDomain		The domain used to create the SMTP email address of the user on the target system.
LocalAddress		The field to store the distinguished name of the foreign user from the legacy email system.
ForwardingAddress		The field to store the forwarding address. This is the SMTP address of the user on the legacy email system.
DisplayName		Field where the display name is to be stored

eshuttle.ini file configuration parameters for LDAP Directory Synchronization