



# Address Translation Administrator Guide

This guide is for administrators of MessageLabs Email Services. This guide is for administrators of MessageLabs Email Services. The Address Translation service is a MessageLabs Email Services feature that enables external internet-routable email addresses to be converted into internally-routable addresses, and vice versa.

Document version 1.0  
2006-12-07

# Table of Contents

1	About the guide	3
1.1	Audience and scope	3
1.2	Versions of this guide	3
1.3	Conventions	3
2	Introduction to Address Translation	4
3	Configuring Address Translation	5
3.1	Formatting configuration data	5
3.2	Providing configuration data in CSV files	5
4	Uploading addrtrans.csv	6
4.1	Generating sha1sums (Linux)	6
4.2	Generating sha1sums (Windows)	6
4.3	Uploading CSV files to a Linux server	7
4.4	Uploading CSV files to a Windows server	7
5	Maintaining Address Translation data	8

## 1 About the guide

### 1.1 Audience and scope

This guide is for administrators of MessageLabs Email Services. The Address Translation service is a MessageLabs Email Services feature that enables external internet-routable email addresses to be converted into internally-routable addresses, and vice versa.

### 1.2 Versions of this guide

This guide is available in two page sizes: Letter (279 mm x 215.9 mm) and A4 (297 mm x 210 mm). The version is identified at the end of the file name as `_Ltr` or `_A4`. The content is identical in the two versions. Use whichever suits your printing requirements.

### 1.3 Conventions

In this guide, the following conventions are used:

Formatting	Denotes
<b>Bold</b>	Button, tab or field
<b><i>Bold Italic</i></b>	Window title or description
<b>Note:</b>	A note containing extra information that may be useful
<b>Text to type in</b>	Text to type in
<code>Output from a computer</code>	Output from a computer
<a href="#">Link</a>	A link to a website

Screenshots normally display an **Internet Explorer** window. If only part of the window is shown, the side where it is trimmed may be shown with a wavy or dashed line. Areas of the screenshot may be highlighted in red.

## 2 Introduction to Address Translation

Address Translation rules consists of the domain, whether the translation should occur on inbound or outbound mail, what to match as the source addresses, and what to rewrite the addresses to.

Once your Address Translation rewrite rules for your domains are set up and tested, you maintain the configuration data for the routes by uploading a CSV file (comma separated values) of the rules, together with the Named Routes CSV configuration data, using SSH keys and SFTP.

When defining rewrite rules for Address Translation, note the following:

- An email address can only be associated with one rewrite rule
- All email addresses must belong to your organization's domains or subdomains
- All email addresses must be registered addresses (see *ClientNet Administration Guide* and *LDAP Synchronization Tool Administrator Guide*)
- Per User Email Routing must already be in use on any domain you wish to have rewrite rules for

### 3 Configuring Address Translation

Maintaining up-to-date address translation data is a straightforward process of uploading revised CSV files when necessary.

#### 3.1 Formatting configuration data

Each individual rule must be formatted as follows:

```
domain,in-out-flag,source-pattern,dest-pattern
```

Where:

- *domain* is the parent domain for the source-pattern.
- *in-out-flag* is either 'inbound' or 'outbound', and signifies which direction of mail the pattern should be applied against.
- *source-pattern* is a potentially singly left-globbed pattern describing the matching condition to be used to trigger the rewrite described in dest-pattern. The pattern is of the form:
  - \*.example.com # matches any subdomain of example.com
  - \*.foo.example.com # matches any subdomain of foo.example.com
  - example.com # matches example.com (no subdomains)
- *dest-pattern* is the replacement to be applied.

The entire matched pattern from the source-pattern will be replaced with the dest-pattern, using the following semantics:

- Literal text will appear in the replacement as-is
- A globbing character ("\*") will be replaced by the value in the original subject matched by the glob character in the source-pattern
- A dest-pattern may not have a globbing character in it if its corresponding source-pattern does not have a glob. This will be considered as a syntax error.

Exceptions can be specified by creating more specific rules. For instance:

```
foo.example.com,foo.example.net  
*.example.com,example.net
```

will result in mail for `foo.example.com` being rewritten to `foo.example.net`, whilst all other subdomains of `example.com` will be mapped to just `example.net`.

#### 3.2 Providing configuration data in CSV files

All of the configuration to define your Address Translation rules are contained in one CSV file, as follows:

```
addrtrans.csv
```

An example of the CSV file is shown below in Microsoft Excel:

	A	B	C	D	E	F
1	lukashopwood.co.uk	inbound	lukashopwood.co.uk	lukashopwood.com		
2	lukashopwood.co.uk	outbound	lukashopwood.com	lukashopwood.co.uk		
3						
4						
5						
6						

When you create your CSV file, ensure that you save it using the CSV format. Also ensure that you name it `addrtrans.csv`

## 4 Uploading addrtrans.csv

You can upload the `addrtrans.csv` file to the MessageLabs Address Translation infrastructure from either a Linux server or a Windows server.

You must also generate a `sha1sum` for the CSV file. This is then uploaded with the CSV file.

**Important:** When you upload a set of files for a domain, you must also upload a blank file with the name of `DONE`. This must be a completely empty file and must not have any extensions appended to it, such as `.txt` and `.zip` etc.

### 4.1 Generating sha1sums (Linux)

You must generate a `sha1sum` for each CSV file and upload these to the MessageLabs infrastructure along with the `addrtrans.csv` file.

1. Open a terminal.
2. Navigate to the directory where the CSV files are located.  
`cd /path/to/csv/files`
3. Enter the following:  
`sha1sum *.csv`  
This produces an output similar to the following:  
`27b8c32bb18cdf2d8250b29ebe4d5347f8e69a3e addrtrans.csv`
4. Copy and paste the relevant `sha1sum` to a file named `xxx.sha1` for each file, for example:  
`addrtrans.sha1`  
`27b8c32bb18cdf2d8250b29ebe4d5347f8e69a3e`  
**Note:** There must be no other characters within the `.sha1` files other than the `sha1sum`.
5. Save the `sha1sum` files into the same directory as the CSV files.

### 4.2 Generating sha1sums (Windows)

You must generate a `sha1sum` for each CSV file and upload these to the MessageLabs infrastructure along with the `addrtrans.csv` file.

1. Download the `sha1sum.exe` binary from <http://mirrors.rootmode.com/ftp.gnupg.org/binary/sha1sum.exe>
2. Move this binary into `C:\Windows` (or wherever your Windows installation is located).
3. When this is downloaded, open a command prompt (**Start > Run > cmd > Enter**).
4. Navigate to the directory that contains your CSV files:  
`cd <directoryname>`
5. Enter the following:  
`sha1sum *.csv`  
This produces an output similar to the following:  
`27b8c32bb18cdf2d8250b29ebe4d5347f8e69a3e addrtrans.csv`
6. Copy and paste the relevant `sha1sum` to a file named `xxx.sha1` for each file, for example:  
`addrtrans.sha1`  
`27b8c32bb18cdf2d8250b29ebe4d5347f8e69a3e`  
**Note:** There must be no other characters within the `.sha1` files other than the `sha1sum`.
7. Save the `sha1sum` files into the same directory as the CSV files.

### 4.3 Uploading CSV files to a Linux server

When you upload your `addrtrans.csv` file to the MessageLabs Address Translation infrastructure, you must also upload the `shalsum` and `DONE` files. To ensure that all files are uploaded together, save all of the files to the same directory and use the `put pathoffiles/*` command.

1. Open a terminal.
2. Move the two SSH key files provided by MessageLabs into the following path on the machine that you will be uploading from:

```
/home/$USER/.ssh/
```

3. Enter the following:  

```
chmod 700 ~/.ssh
```

 (this ensures that permissions are set correctly on the folder)  

```
chmod go-rwx ~/.ssh/*
```

 (this ensures that permissions are set correctly on the key files)

4. In the terminal, enter the following:  

```
sftp username@upload.pur.XX.messagelabs.com
```

**Note:**

If this is the first time you have connected to this particular `remote_host`, you will see something like the following:  
The authenticity of host 'remote\_host (132.236.123.102)' cannot be established.  
RSA key fingerprint is 17:a7:ac:13:07:5b:5d:2b:d7:22:16:c7:61:01:20:33.  
Are you sure you want to continue connecting (yes/no)?

If you are sure that you are connecting to the proper `remote_host`, type `yes` and press **Enter**.

5. An interactive session is started in which you can upload files using standard FTP commands.
6. Using the following commands to put the `addrtrans.csv` and corresponding `.sha1` and `DONE` files onto the server:

```
put pathoffiles/*
```

7. Type `quit`.
8. To check the status of the upload, wait a few minutes, and then reconnect via SFTP and type the following:

```
get STATUS
```

This file contains information on the success of the upload into the MessageLabs Address Translation infrastructure.

### 4.4 Uploading CSV files to a Windows server

When you upload your `addrtrans.csv` file to the MessageLabs Address Translation infrastructure, you must also upload the `shalsum` and `DONE` files. To ensure that all files are uploaded together, save all of the files to the same directory and use the `put pathoffiles/*` command.

Before starting the upload procedure, put the SSH key provided by MessageLabs onto your C: drive so that you can locate them during the upload procedure, for example, `C:/keys`.

**Note:** An `upload.pur.XX.messagelabs.com` address is given to you when you are provisioned on the Per User Email Routing service. The Address Translation and Per User Routing service use the same address for uploading configuration data.

1. Go to the PuTTY download page. (This is a free open source Windows SSH client):  
<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>
2. Download the PSFTP binary.
3. Move the PSFTP binary to `C:\Windows` (or wherever your Windows installation is).
4. When this is downloaded, open a command prompt (**Start > Run > cmd > Enter**).
5. Type the following:  

```
psftp.exe -i C:/keys/nameofprivatekeyfile.key username@upload.pur.XX.messagelabs.com
```
6. An interactive session is started in which you can upload files using standard FTP commands.
7. Upload your `addrtrans.csv` and corresponding `.sha1` file to the server using the commands:

```
put pathoffiles/*
```

8. Type `quit`.
9. To check the status of the upload, wait a few minutes, and then reconnect via PSFTP, and type the following:

```
get STATUS
```

This file contains information on the success of the upload to the MessageLabs Address Translation infrastructure.

## 5 Maintaining Address Translation data

Once your Address Translation rules are configured and up and running, you may need to update the details periodically to reflect changes within your organization. To do so, you just edit the CSV files and upload them to the MessageLabs infrastructure as required, using the procedures provided above.

When you update the `addrtrans.csv` file, you must maintain it as a complete list; incremental updates that just contain new email addresses, for example, are not supported. When you update a file, the data overwrites all previous data.

By revising the CSV file, you can:

- Edit which domain the rule affects, or what pattern it uses to match
- Delete a rule
- Edit the domain associated with a rule

**Note:** You must also update the `sha1sum` files when uploading new data; otherwise the upload will not be successful.



## Further information

In this administrator guide you will find all the information that you need to enable you to use the Address Translation feature.

If you need any further information, the following resources are available:

Administrator guides	For full details on configuring your domains and users and on general administration tasks in ClientNet	ClientNet Administrator Guide
	For full details on the using the MessageLabs synchronization tool	LDAP Synchronization Tool Administrator Guide
Knowledgebase	Search the online knowledgebase in ClientNet	Log into <a href="https://clients.messagelabs.com">https://clients.messagelabs.com</a> and navigate to <b>Support &gt; Knowledgebase</b>
Support ticket	Open a support ticket in ClientNet	Log into <a href="https://clients.messagelabs.com">https://clients.messagelabs.com</a> and navigate to <b>Support &gt; Support Ticketing Center</b>
Email	Email Global Technical Support (GTS) at the following email address	Email <a href="mailto:support@messagelabs.com">support@messagelabs.com</a>
Telephone	Call MessageLabs Global Technical Support (GTS)	See the contact details on the next page

## Feedback

We welcome your feedback. If you have any comments or questions about this guide or the services and features described in it, or to let us know how your MessageLabs service is performing and provide suggestions as to how MessageLabs can further support your business needs, please email us at [feedback@messagelabs.com](mailto:feedback@messagelabs.com).

**www.messagelabs.com**  
**info@messagelabs.com**

Freephone UK  
0800 917 7733

Toll free US  
1-866-460-0000

Europe  
HEADQUARTERS  
1270 Lansdowne Court  
Gloucester Business Park  
Gloucester, GL3 4AB  
United Kingdom

T +44 (0) 1452 627 627  
F +44 (0) 1452 627 628

LONDON  
3rd Floor  
40 Whitfield Street  
London, W1T 2RH  
United Kingdom

T +44 (0) 207 291 1960  
F +44 (0) 207 291 1937

NETHERLANDS  
Teleport Towers  
Kingsfordweg 151  
1043 GR  
Amsterdam  
Netherlands

T +31 (0) 20 491 9600  
F +31 (0) 20 491 7354

BELGIUM / LUXEMBOURG  
Culliganlaan 1B  
B-1831 Diegem  
Belgium

T +32 (0) 2 403 12 61  
F +32 (0) 2 403 12 12

DACH  
FeringasträÙe 9  
85774 Unterföhring  
Munich  
Germany

T +49 (0) 89 189 43 990  
F +49 (0) 89 189 43 999

© MessageLabs 2006  
All rights reserved

Americas  
AMERICAS HEADQUARTERS  
512 Seventh Avenue  
6th Floor  
New York, NY 10018  
USA

T +1 646 519 8100  
F +1 646 452 6570

CENTRAL REGION  
7760 France Avenue South  
Suite 1100  
Bloomington, MN 55435  
USA

T +1 952 886 7541  
F +1 952 886 7498

Asia Pacific  
HONG KONG  
1601  
Tower II  
89 Queensway  
Admiralty  
Hong Kong

T +852 2111 3650  
F +852 2111 9061

AUSTRALIA  
Level 6  
107 Mount Street,  
North Sydney  
NSW 2060  
Australia

T +61 2 8208 7100  
F +61 2 9954 9500

SINGAPORE  
Level 14  
Prudential Tower  
30 Cecil Street  
Singapore 049712

T +65 62 32 2855  
F +65 6232 2300