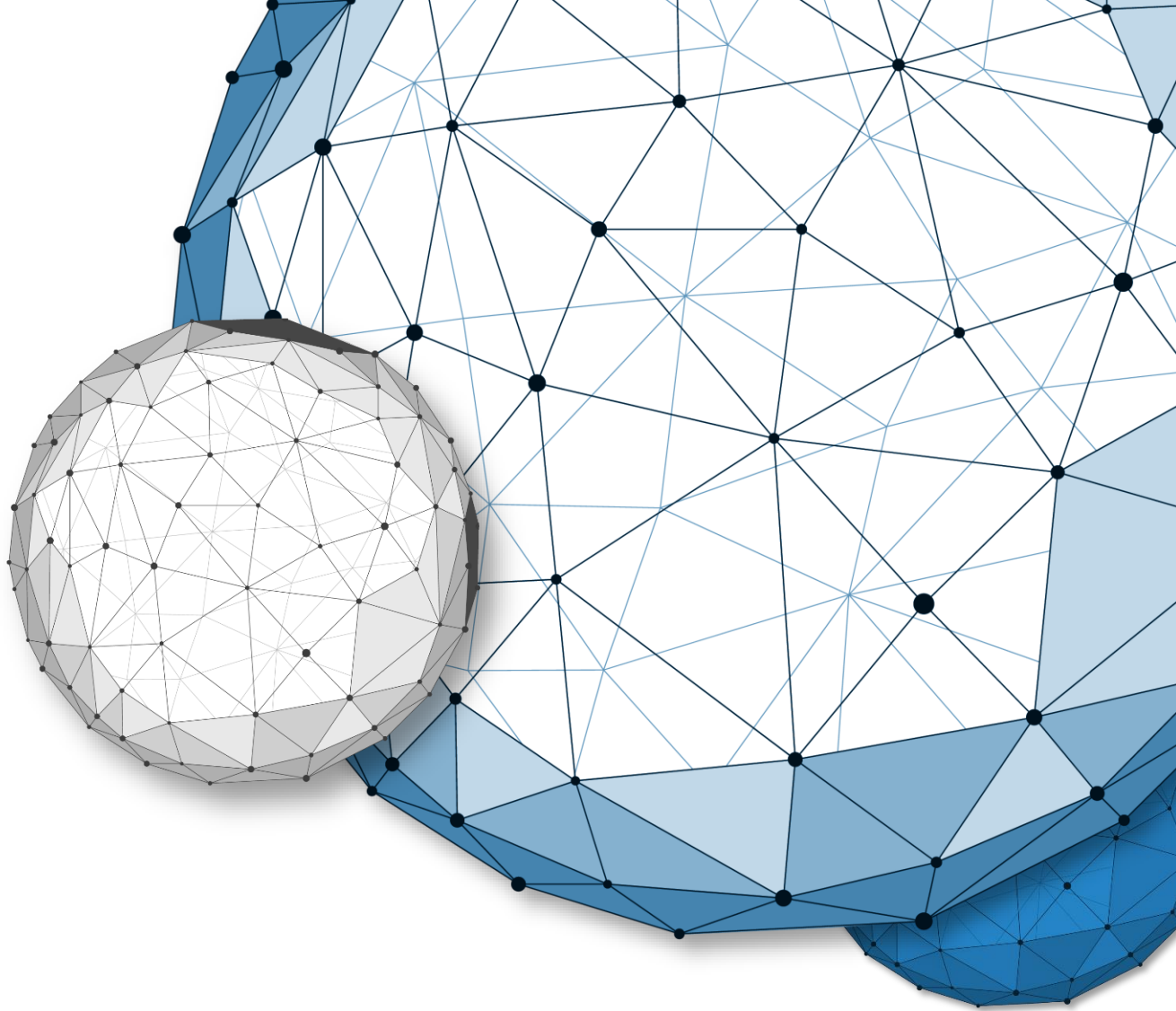


The **Experts**  
in Exchange  
Migrations



DOCUMENTATION

# Rules Migration Utility

---

For Exchange On-premises and Office 365 Migration Scenarios



# Rules?

Microsoft Exchange, in combination with Microsoft Outlook, supports an ability to create a processing rule that can take action on incoming and outgoing messages. The range of ability of these rules cover the expected actions such as replying or moving messages to a folder, but also have unique capabilities such as playing a sound.

Rules come in two flavors:

- Server-side rules
- Client-only rules

Server-side rules are actions that can occur solely at the Microsoft Exchange Server, regardless of whether the user is logged in, or not, and regardless of whether Outlook is connected. Server-side rules, therefore, are limited to a handful of actions: move/copy, forward/reply, bound, etc. The pattern is one where the actions make sense for something the mail server can do without dependence upon the end user.

Client-only rules are actions that involve some element that requires Outlook to be running. Playing sounds, saving as a file, showing a dialog are all examples that will cause a rule to become a client-only rule. Client only rules can also perform the same server-side actions mentioned previously – like replying to a message. If a rule is created to forward a message AND play a sound, that becomes a client-only rule.

There is a common misconception that client-only rules somehow are an element of an Outlook profile. This is simply not true. An Outlook profile is nothing more than settings that determine HOW and WHERE Outlook should connect. ALL RULES are stored in the user's Exchange mailbox.

## MIGRATION

Priasoft's Rules Migration Utility is able to migrate both server-side and client-only rules.

In the case of server-side rules, the utility attempts to "translate" server-side rules in order to update information in them with valid pointers to relevant objects from the new mailbox environment. For example, a Move-To-Folder rule stores the information about the destination folder as a binary identifier of the folder. This ID is unique and specific to the mailbox in which it belongs. When a mailbox is migrated, the new mailbox will have completely different IDs for folders, and as such the folder "pointer" in the rule – if not updated – will be incorrect. The Rules Migration Utility will reset this folder pointer to the same folder in the target mailbox – provided that the folder exists.

However, Priasoft is unable to do the same thing for client-only rules. Unfortunately, the data that is stored in the user's mailbox for a client-only rule is undocumented and no developer API is provided for working with this data. The Rules Migration Utility will still migrate these rules, but if they also contain server-side features – like forwarding to a user or moving to a folder – those rules will be disabled in the new mailbox and the user will have to update them manually.



## INSTALLATION

### DEPENDENCIES

The Rules Migration Utility is a .NET 4.5 (or later) application.

In addition to Microsoft .NET, the application must have a properly installed MAPI subsystem. Such is provided by a properly installed version of Outlook. This utility will work with Outlook 2010 or 2013, 32bit or 64bit.

**The Rules Migration Utility currently does not support execution on Windows 10 or Server 2016. This only affects the use of the utility; end-user Operating System version is not of concern.**

The common deployment of this utility is on a single host that has access to both the source and target Exchange servers, or Internet if either is Office 365. The utility will be able to migrate rules for any mailbox for which the provided credential has permission to open. The utility is NOT expected to be run on users' desktops.

The Rules Migration Utility is designed to be an easy-to-use solution. There is no formal installer application as the app is an 'x-copy' type of application. All of the necessary files are contained in the provided zip file for the utility. As long as the DLLs and supporting files of the application are in the same folder, the utility requires no other elements.

## USAGE

The Rules Migration Utility is a single-mailbox utility application provided as a command-line driven tool. This allows for easy introduction in to automation patterns, such a Priasoft Mailbox Migration tool or others.

The application can work either thru the use of command-line arguments to define the mode and behavior, or can read the same values from the application environment variables. For the later mode, if environment variables are set in the application that will launch the Rules Migration Utility, those same environment variables are copied to the "child" application. This is a natural behavior of the Windows operating system.

### LOGGING

All actions performed are logged. By default, the log files are created in the same folder as the application. The MigrateRules mode provides a parameter to change the logging location for that mode.

### MODES

The application can operate in one of the following modes:

- Show Help
- CreateRequestKey
- SetLicense
- ShowLicense
- CreateEncryptedPassword
- MigrateRules



## SHOW HELP

This mode simply lists all the command line parameters available. This mode occurs when no command line parameters are provided, and no matching environment variables exist.

Example: **MailboxRulesMigrator.exe**

Output: The list of current modes and command-line parameters.

## CREATE REQUEST KEY

This mode is used to create a license request key that is used by Priasoftware Sales to create a host-specific license key.

Example: **MailboxRulesMigrator.exe –mode CreateRequestKey**

Output: The host-specific request key.

## SET LICENSE

This mode is used to apply a license key to the host.

Example: **MailboxRulesMigrator.exe –mode SetLicense –licenseKey <license key returned from sales>**

Output: The details of the license are printed on screen.

## SHOW LICENSE

This mode will display current license info on-screen.

Example: **MailboxRulesMigrator.exe –mode ShowLicense**

Output: The current license info.



## CREATE ENCRYPTED PASSWORD

This mode causes the application to generate an encrypted password value so that it can be safely used in scripts. The application uses AES encryption with a 256bit key.

### PRESHARED KEY

This version uses a preshared key to encrypt the password. A 256bit hash of the key is used for encryption.

Example: **MailboxRulesMigrator.exe –mode CreateEncryptedPassword –EncryptType PSK YourPresharedKeyText –Password ThePasswordValueToBeEncrypted**

### HOSTKEY

This version uses a host-specific value to encrypt the password. A 256bit hashed value is created that is unique to the host that generates it. An encrypted password using this version can only be decrypted on the same host that generated it.

Example: **MailboxRulesMigrator.exe –mode CreateEncryptedPassword –EncryptType HostKey – Password YourPasswordValueToBeEncrypted**

## MIGRATE RULES

This mode is used to migrate rules from a source mailbox to a target mailbox. It has the following parameters:

- -mode
- -srcMailbox
- -srcExchServer
- -srcCred
- -dstMailbox
- -dstExchServer
- -dstCred
- -logPath

### SRCMAILBOX / DSTMAILBOX

These parameters refer to the email address of the source or target mailbox. This address must be one of the email addresses found on the mailbox as either the primary address, or one of the secondary ones (if any).

Example:     -srcMailbox [source.smtp@address.com](mailto:source.smtp@address.com)  
              -dstMailbox [destination.smtp@target-domain.com](mailto:destination.smtp@target-domain.com)



## SRCEXCHSERVER / DSTEXCHSERVER

These parameters refer to the exchange server that will be used. Office 365 always uses the value 'outlook.office365.com'.

For Exchange 2010 and later, this value should point to one of the CAS role servers. This value is also used initially as the AutoDiscover endpoint.

For Exchange 2007 and earlier, this value should point to the Exchange server hosting the mailbox. AutoDiscover is attempted, and if fails a legacy configuration process will be used to create a MAPI profile.

Example:        -srcExchServer exch01.company.local  
                  -dstExchServer mail.services.com

## SRCCRED / DSTCRED

These parameters are used to authenticate to the respective exchange server above. These must be a credential with either Owner or FullAccess permissions over the mailbox.

The format of these parameters are:

```
-srcCred IDENTITY:PASSWORD  
          OR  
-dstCred IDENTITY:PASSWORD  
          OR  
-srcCred Cached:CachedCredentialName  
          OR  
-dstCred Cached:CachedCredentialName
```

The 'Cached:' format allows for the selection of a credential from the Priasoft Cached Credential store, which is created and managed by the Priasoft Migration Suite. The 'CachedCredentialName' value is the name of the credential or the server name value in the store.

The IDENTITY element is either the windows trustee format (DOM\user) or User Principal Name format ([user@dom.com](mailto:user@dom.com)).

The PASSWORD element is one of the following formats:

- Plain text
- HostKey;Enc=<encrypted password>
- PSK=YourPresharedKey;ENC=<encrypted password>

Note: The command-line parser explicitly looks for the tokens 'HostKey', 'PSK', and 'ENC=' when using either the PSK or HostKey versions. There is a semi-colon character just before the 'ENC=' token.

Example:        -srcCred admim@domain.com:PSK=SuperSecret!;ENC=ajfiJHidhwoKHlk1098\kh+=  
                  -dstCred DOM\exadmin:HostKey;ENC=iiahfiuhHNIun\ah\l==  
                  -srcCred DOM\migadmin:PlainTextPassw0rd!  
                  -dstCred Cached:TargetMapi (EXCH-ORG-1)

Note: the credential parameters are optional. If they are not present on the command line, the utility will attempt to use a single SourceMapi or TargetMapi account from the Priasoft Cached Credential store.



## LOGPATH

This will direct the application to create and write log info to the file system path provided.

Example:     -logPath c:\users\admin\Documents\RulesLogs

Complete Examples:

**MailboxRulesMigrator.exe -mode MigrateRules -srcMailbox [joe@dom.com](mailto:joe@dom.com) -srcExchServer msexch01.dom.local -srcCred [exadmin@dom.com:PlainTextPass](mailto:exadmin@dom.com:PlainTextPass) -dstMailbox [joe@dom.com](mailto:joe@dom.com) -svr-exch-pri.newdom.com -dstCred newdom\migadmin:PlainPassword**

**MailboxRulesMigrator.exe -mode MigrateRules -srcMailbox [john@little.com](mailto:john@little.com) -srcExchServer ROBIN.hood.com -srcCred Cached:SourceMapi (Little) -dstMailbox [john@loxley.com](mailto:john@loxley.com) -dstExchServer Sherwood.forest.com -dstCred SHERWOOD\lexadmin:HostKey;ENC=abix8HuhnHHJKs==**

**MailboxRulesMigrator.exe -mode MigrateRules -srcMailbox [john@little.com](mailto:john@little.com) -srcExchServer ROBIN.hood.com -dstMailbox [john@loxley.com](mailto:john@loxley.com) -dstExchServer Sherwood.forest.com**