

Outlook Profile Mechanics



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1. General

Outlook Profile Mechanics is a tool that creates Outlook profiles.

It is meant as a helper for automation of profile creation in large organizations.

End-users normally don't need this tool since they can simply invoke Outlook and create their profile by using the profile creation wizard.

1.1. Concepts

The tool is built upon the following basic concepts:-

- **Modularity and extensibility**
Currently, the tool has special knowledge about the Scalix, Zarafa and Exchange server types. With reasonable effort, it can be extended to support other server types too.
- **Compatibility**
Wherever possible, the quirks and capabilities of different Office versions or server types are hidden from the user. The tool detects the Office version and behaves accordingly. There's experience about Office versions ranging from Office XP to Office 2010. As Office constantly evolves, there is a chance to come across new compatibility issues.
- **Internationalization**
The tool generally speaks English. This should be the best choice for big businesses that span multiple countries. But if someone needs it, it can easily be translated into different languages.¹

Additionally, the tool knows about a concept of *primary* and *additional* profiles. This is based on a scheme where a user has exactly one mail account tied to his/her identity, and an arbitrary number of mail accounts tied to his/her business roles. The tool helps managing the respective profiles by providing different sets of default values. See the description of the --add option on page 9 and the section about Alternate configuration file sections on page 17.

1.2. Invocation

The tool is a console program. It can be called manually by typing OLKPMECH in a CMD window, or by calling it via a batch script (.bat file).²

Generally, the tool does not require user interaction. There are exceptions to this rule:-

- If the tool prints a help text and the text doesn't fit into the current console window, it will wait for a key to be pressed, just like "MORE" would do. To avoid this behavior inside of batch scripts, use the --batch option.

¹ The tool is limited to the capabilities of the console subsystem using so-called codepages. Even if there's a pseudo-codepage 65001 (Unicode) the tool isn't capable of using it.

² Specify the full path where OLKPMECH.EXE resides, or refer to your system documentation on how to include its path into the so-called "search path".

- The tool can allow popup dialogs if the current profile type requires user input. It depends on the type of profile to be created. Normally, this is switched off. See the description of the `--allow-ui` option on how to use that, and when it would make sense.
- The tool can allow a password dialog if it is directed to open a password-protected PST file. See the description of the `--allow-pst-ui` option on how to use that.

1.3. Configuration

Generally, all functions of the tool can be achieved by specifying command line options. While this can be handy while developing, it can produce nearly unmaintainable or unreadable script code. The tool provides some levels of configuration to help the admin in writing better scripts.

- **hard-coded defaults**
Anything coded into the executable itself. These are defaults that are very unlikely to be changed, such as default ports. Of course, one can override them using the methods described below.
- **initialization file**
The tool provides the concept of an initialization file that should hold company-wide defaults, such as host names, archiving behavior etc. The initialization file is expected in the same location as the executable, but named `.INI` instead of `.EXE`. All functions and settings known to the tool can be set this way.
- **configuration file**
To store defaults that apply to different parts of your organization (organizational units etc), the tool allows specifying of a configuration file. As always, all parameters can appear here. Note that the current implementation doesn't accept multiple config files.
- **command-line options**
If the above levels are used carefully, the invocation of the tool can be made nearly without the need of command-line options. They should be strictly limited to those options that really differ from one user to another.

Note that the parameter values stored in files can easily refer to variables:-

- The tool resolves spans of `%ENVIRONMENT_VARIABLE%`, just like the CMD shell would do. That way, you can use variables like `%HOMEDRIVE%`, `%HOMEPATH%`, `%APPDATA%` or `%TEMP%`.
- Additionally, spans of `{CODE}` can be resolved into the value of internal variables. If you want to know the full amount of these codes, invoke `OLKPMECH` with the `--print-defaults` and `--verbose` switches.

Here's a short example that shows how you can use these features: if you want a log file to be written into the user's home directory, and named according to the profile name:

```
LogFile = %HOMEDRIVE%%HOMEPATH%\Logs\Mail_{PPRN}.log
```

1.4. Error processing and logging

Any error conditions are printed on the standard error channel and indicated by a nonzero exit code (%ERRORLEVEL% environment variable). There is no separate log file. If you want errors to be logged, redirect standard error to a file.

The tool will always stop at the first error found. If used interactively (e.g. without the --batch option) the help message is printed after the error message.

Note that the tool will print some progress messages on standard error even if it is successful. If you want it entirely silent, you can always redirect standard error.

1.5. Known Limitations

This section describes the known limitations of Outlook Profile Mechanics, and where possible, ways to circumvent them.

1.5.1. General limitations

- Outlook Profile Mechanics implements options only as far as they are of general use (server name, account name etc.) or some customer asked for their implementation. There's always a chance to find options in the Outlook option dialogs that Outlook Profile Mechanics can't set at the moment. Please ask office@it25.de if you need additional options.
- There can be circumstances where Outlook Profile Mechanics can't set certain options.³ Generally, you won't notice that while invoking the tool, but when Outlook is started your options won't work. This is caused by policies or global Exchange settings which Outlook Profile Mechanics cannot circumvent. You're at the mercy of your administrator to find the corresponding settings and to let them work for you.

1.5.2. Dependencies to the Office version in use

- Outlook Profile Mechanics knows some options which depend on the Office version. For such options, we established default values suitable for older Office versions too. In the event that MAPI throws "not supported" errors you're free to set sensible defaults using the INI file or config file.⁴
- Incompatibilities between Office versions should not worry the user. Outlook Profile Mechanics should act accordingly, at least for quirks it knows about.⁵ If the --verbose switch is in effect, the tool will emit a warning about any workaround it applies.

3 Examples for such options are mostly security-related settings: enforcement of encryption, authentication modes etc.

4 If you're using different Office versions across your organization you should prepare different INI/config files, and arrange for selective use, perhaps using startup or login scripts.

5 One example for incompatible behaviour is the MAPISVC.INF file which is not maintained anymore, starting with Office 2007. Office updates can easily remove this file, effectively destroying any third-party MAPI service providers installed at the moment.

1.5.3. Dependencies to the server type

Outlook Profile Mechanics knows the quirks and capabilities of the supported server types. It will refuse to set options if:-

- a requested option is known not to work with the given server type
- a requested option is not implemented yet (as always: you may ask for it)

Under all circumstances, Outlook Profile Mechanics will emit a meaningful error message if it can't fulfill your request.

2. Command line options

The tool is controlled by command line options. Some general rules apply:-

- The tool knows short options (one dash and one letter) and long options (double dash and one or more words, separated by hyphens). Some examples of valid options:-

```
-x
--cache
--print-defaults
--allow-pst-ui
```

- Options and their values are not case-sensitive. Wherever the MAPI requires exact case the tool compensates for this.
- Order of options is not relevant in any way. The only rule is that where an option requires a value, the value must directly follow that option.
- Options are separated from each other by any amount of whitespace.
- Separator character between an option and its value is usually whitespace. For long options, the equals sign is also allowed. The following notations have the same effect:-

```
OLKPMECH -t MSEMS
OLKPMECH --type MSEMS
OLKPMECH --type=MSEMS
```

- Option stuffing is allowed: short options can be written as one string as long as they don't require a value (except the last one). The following notations have the same effect:-

```
OLKPMECH -x -e -t MSEMS
OLKPMECH -xet MSEMS
```

- Options are not allowed to appear twice on the command line.
- Boolean values can be expressed numerically (zero is FALSE, anything else is TRUE), and some English representations (yes, no, on, off, true, false). Boolean TRUE values can be omitted where it is obvious. A boolean value is therefore only really required if the default of an option is TRUE but you want to set it to false. The following notations have the same effect:-

```
OLKPMECH --type MSEMS --cache  
OLKPMECH --type MSEMS --cache on  
OLKPMECH --type MSEMS --cache yes  
OLKPMECH --type MSEMS --cache 1
```

- File name arguments that contain whitespace or shell metacharacters have to be quoted by “double quotes”, according to the rules of the “CMD” shell. Note that relative paths are automatically expanded to absolute paths (with drive letter).
- It is not guaranteed that UNC path names would work in all situations. Better avoid using them.

2.1. General options

-h (--help)

Shows help text. Amount of information is affected by these switches:-

- -v (--verbose) additionally shows less-frequently used options.
- -t (--type) <type> shows options relevant to the given server type.

-v (--verbose)

Switches to a verbose display mode:-

- when used together with -h (--help), shows less-frequently used options.
- when used together with --print-defaults, adds comments about origin, comment text, internal variable code and environment variables being resolved.
- during the work of the tool, it prints diagnostic messages about the progress, parameters being set/resolved etc.

-n (--dry-run)

Dry-run mode only performs the whole argument processing but doesn't do any action (create/remove/configure profiles). Most useful together with -v (--verbose) to see origin and actual value of all variables.

--auto

Automatically creates default profile. Historically, a call to OLKPMECH.EXE without any options will only print the help text, such that somebody clicking on the EXE file wouldn't do any real action by accident. With the introduction of INI file and configuration file, the tool has the ability to do real action without any command line options. The option --auto does exactly this: let the tool do real action even though no option is given.

-i

With this option, the tool ignores the default INI file. Normally the tool would read soft-coded defaults from a file, residing in the same directory as the program itself, named like the executable file, but ending in '.INI'. With this option, the tool behaves as if that file wouldn't exist.

-z (--noreg)

Does not change any local Outlook settings that are effective in all profiles.

-c (--config) <filename>

Directs the tool to read an additional configuration file. Any error reading that file stops the program.

--lang <language_id>

Directs the tool to switch to the given output language. Special behavior can be requested with the following values:

- **help** lists the translations currently available
- **auto** uses the language of the current user's UI session if available.

Note that, besides the --lang option, you may specify the language in any configuration file, and the environment variable LANG is also honored.

-y

The tool continues to work if the given profile type can't be found in the MAPISVC.INF, or even if it can't find a MAPISVC.INF file. Starting with Office 2007, this switch is set automatically if you want to create an Exchange profile.

--batch

Normally, the tool will stop display and wait for a key to be pressed after each screenful of output. Use the --batch option to switch this off, for unattended use in batch scripts.

2.2. Options related to the profile to be created

-p (--profile)

Sets the name of the profile to be created. An existing profile of that name will be deleted prior to creating the new one. The name is case-insensitive. If the profile name is not specified it defaults to the name of the mailbox.

-t (--type)

Sets the type of the primary message store provider. Must be one provider as read from the MAPISVC.INF file, or can be any value if the -y option is set (see there). Use the help function to get a list of message store providers currently known to the tool. Even though the MAPI is very picky about the case of the type, you're not required to know that; OLKPMECH will use the required case for you.

--remove-all

Prior to creating the profile, the tool will delete all existing profiles. The tool doesn't ask again before doing that. This option has different defaults depending on the presence of the --add option.

-d (--default)

Sets the profile being created to be the default one. This option is only effective if there are multiple profiles, and the user must select the one to work with. Depending on the presence of the --prompt option, this would mean:-

- if --prompt is on, the default profile is preselected when the profile selection dialog opens.
- If --prompt is off, the default profile is immediately opened by Outlook.

--prompt

Lets Outlook ask for the profile to be opened (even if there's currently only one).

-a (--add)

Creates an 'additional' profile instead of a 'default' one. This applies to a scheme where a given user usually has one account tied to his/her identity whereas other mail accounts refer to business roles of the given user. The option switches to an alternate set of predefined setup variables that could contain the following settings:-

- Don't delete any existing profiles prior to creating the requested profile.
- Set the switch that opens the profile selection dialog whenever the user starts Outlook.
- In the profile selection dialog, don't preselect the current profile.
- Don't set local Outlook settings that would affect all profiles.
- Use password authentication instead of Kerberos (if the server type supports that).
- Don't include the default PST files into the profile.

Note that you are not limited to these settings. A configuration file can contain a complete set of variables that apply only if the --add option is set. Refer to section 3.1 (Alternate configuration file sections) on page 17.

2.3. Diagnostic options

These options help diagnosing problems if the tool doesn't behave as expected.

--allow-ui

Allows the MAPI to open the Profile Creation Dialog if additional input is needed or if the options provided would result in errors. Normally, you don't want this option since the tool is made to work unattended. But to diagnose problems, you can switch it on and try to find which parameters are wrong.

--keep-incomplete

If profile creation fails, the tool deletes the halfway-configured profile: it wouldn't be usable either. With this option, the profile won't be removed. That way, you can examine what went wrong, or send a regdump of the failed profile to the development.

--version <major.minor>

Overrides auto-detection of the Office version. Should only be needed if the Office installation of a given client contains tools of different versions, and the tool doesn't reliably detect the Office version.

2.4. Options that don't involve profile creation

These options are there to help writing scripts. Theoretically, there are more things one could do with MAPI profiles. The options here were implemented only when requested by script authors. Feel free to ask office@it25.de if you feel the need for other tool options.

2.4.1. Informative options

These options simply read something from the current MAPI profiles.

--print-defaults

The tool prints out a full listing of all configuration settings, in a format usable as an INI file. The `--verbose` option affects the amount of information being printed. Starting with this output, you can walk through everything that can be set, and use it in your initialization or configuration file.

You can also use this information to learn where a given variable came from (default, ini/config file, command line).

--list-profiles

Prints a listing of currently configured profiles. When used together with the `--type` option the listing is limited to profiles of the given type.

--get-default-profile

Prints the name of the default profile if there's at least one profile.

2.4.2. Other options

--remove-profile

This option is not tied to any profile creation. If it is encountered at the command line the tool will **only** remove profiles. The profiles to be removed can be selected by the following options (exactly one out of them is required):-

- `-p` (`--profile`) selects the named profile for removal.
- `-t` (`--type`) selects all profiles of the given type for removal.

2.5. Options related to saving/restoring of profile properties

The tool is not limited to creating profiles, it can do some special operations with profiles, either in the course of profile creation, or even dealing with already-existing profiles. This section is about the feature of saving and restoring profile properties.

The basic operation scheme here is:-

- **Saving properties** ... extracts some properties from existing profiles and writes them into files.
- **Restoring properties** ... is only done in the course of profile creation, so the newly-created profile will reflect what was saved before.⁶

Currently the save/restore feature knows only about these topics:-

- **P** (personal folders) these are local PST files the user may have created, including perhaps an Archive PST file. Note that the tool can't know about PST files that are currently not attached to the given profile.
- **M** (delegate mailboxes) these are mailboxes the current user has configured to be visible in the given profile.⁷

⁶ Generally, it would be possible to restore properties into existing profiles too, but this was not yet required by any of our customers.

⁷ If Outlook is configured to autodetect delegate access it can silently add or remove mailboxes the user has access to. The tool can't tell the difference to manually added mailboxes, and would list them all.

- **all** (all of the above) this selects all possible topics for saving/restoring.

2.5.1. Options that request saving/restoring at all

-o (--save-settings) <topics>

Lets the tool read some profile properties and write them into a text file.⁸ No profile will be created if this switch is set. Depending on the topics, detailed options (see below) will become mandatory.

-r (--restore-settings) <topics>

After the profile in question has successfully been created and configured, restore the settings named by the topics. Note that restore errors are not fatal: a warning is printed and processing will continue.

2.5.2. Options dealing with PST files

When you have named the topic **P** in your save/restore command, the following options become relevant. You may have already set up an initialization/configuration file that holds defaults for all of them.

--pst-listfile <filename>

This specifies the full path of the file to use for the list of PST files, either for writing (save) or for reading (restore). General rules for file names apply. When saving, you may use the special value '-' (minus) to print the list to standard output.

--list-pst-labels

This is a boolean option that is only relevant when saving PST file names. When it is specified, the listing will not only contain the file names (one per line) but also the labels the user has given to the files in Outlook. A file named 'mail.pst' and labeled "Personal Folders" would then appear as:

```
Mail.PST "Personal Folders"
```

Note that when restoring, the option has no effect; the tool will restore labels if they are present in the listing.

--allow-pst-ui

Allows the MAPI to open a dialog window while restoring PST files into the current profile. This can be necessary if the user has protected their PST files by setting passwords. If this switch is not set then restore of a PST file would fail in such cases.

2.5.3. Options dealing with delegate mailboxes

These options become relevant if the topic **M** (delegate mailboxes) is included in your save/restore command.

--mbx-listfile <filename>

This specifies the full path of the file to use for the list of delegate mailboxes, either for

⁸ If there's nothing to write for a given topic, the output file will not be created, just to avoid problems with empty files.

writing (save) or for reading (restore). General rules for file names apply. When saving, you may use the special value '-' (minus) to print the list to standard output.

--mbx-listformat <format>

Selects the property of mailboxes that is to be written into the mailbox list file. Note that this is highly dependent on the server type and its capabilities. If you want to know which of these formats are supported by a given server type, invoke

```
OLKPMECH --help --verbose --type <type>
```

and the resulting help text will only show the supported formats. Here comes the list of formats currently known to Outlook Profile Mechanics:-

- **PLAIN**: the label of the mailbox as displayed in the folder tree in Outlook.
- **NAME**: the PLAIN property (see above) but without the (localized) prefix "Mailbox - ." (if present, else the same as the PLAIN property)
- **X400**: the X.400 address of a given mail account (if the corresponding mail server supports it).
- **SMTP**: the primary SMTP address (without any 'friendly name' additions).
- **DN**: the full DN (LDAP or AD) of the given mailbox object.
- **LOGIN**: the login name used to log in to this mailbox.

When saving the list of delegate mailboxes, in absence of a default format, the tool will choose a default format which is known to give the best results in the restore process. This depends on the type of profile. The output of the help command mentioned above will mark the default format with an asterisk.

2.6. Options that apply to a single server type only

Wherever possible, we have chosen the same option letters for options of similar meaning. We think this makes it easier to understand, but please read the documentation carefully to learn that the exact meaning and allowed values can drastically differ from one server type to the other.

Option names (long options) are mostly named after the wording used in the context of the given mail server type.

2.6.1. Scalix (SCALIX-ON)

-m (--mailbox) <smtpaddr|authid|name>

Name of mailbox that is to be used as primary mail account in the profile. Note that the tool has no means to limit the addressbook lookup to certain fields (SMTP, AuthID or such), so be prepared to handle ambiguities. It's advisable to use SMTP addresses here since they are guaranteed to be unique across an organization.

-s (--server) <hostname|ip>

Specify the Scalix server to connect to. Can be omitted if the Scalix connector is able to find a default server, see Scalix documentation on how to set this up.

-x (--cache)

Switches the profile to be created into "SmartCache" mode.

-e (--ssl)

Requests encrypted communication to the Scalix server (using the SSL protocol over a different port).

-k (--kerberos)

Requests authentication by using the credentials of the current user (via Kerberos).

--logfile <filename>

Set the name of the protocol file to be written to by the connector. Note that this is a mandatory argument. The log file is recreated on every new session login, so move the file away immediately after closing Outlook if you want to keep/analyze it.

2.6.2. Zarafa (ZARAF6)

-m (--mailbox) <authid>

Name of mailbox that is to be used as primary mail account in the profile. The Zarafa Connector uses this value directly as authentication ID.

-s (--server) <hostname|ip|url>

Specify which Zarafa server to connect to. For convenience, you can pass a full URL (with protocol, host name, port and base path) in this parameter. If you pass only an IP or hostname here, the defaults of the "URL detail options" below come into effect.

--password <password|hash>

Specify the password to use when logging in to the Zarafa server. If you know the hashing algorithm or have saved the hash of a password you can use it too. This option is mostly useless for production use since it's highly insecure if an automated script has a means of knowing user passwords.

Profile creation does not strictly depend on the ability to log on. If you omit the password the user will be prompted on first Outlook start.

-x (--cache)

Requests a profile in "Cached Mode". If this switch is set the --cache-path argument becomes mandatory.

--cache-path

Specify the full path of a directory where the Zarafa Connector can store local cache data. Avoid using relative or otherwise incomplete paths. If you set this parameter in the INI or config file it is advisable to refer to user-specific environment variables like %HOMEDRIVE% and %HOMEPATH%.

-e (--encrypt)

Requests encrypted communication to the Zarafa server (using the https:// connection scheme). Additionally, switches from port 236 to 237 unless the --port option is also given.

URL detail options

There are different ways to specify the connection URL to your Zarafa server. A standard

installation of Zarafa is reachable by URLs like these:-

```
http://hostname:236/zarafa
https://hostname:237/zarafa
```

for plain or encrypted communication, respectively. Therefore, for a standard installation you only need to specify the server name (and the `--encrypt` option if desired) and everything will be fine. For special installations, you may specify detail options that override the default logic:-

`--port <port_number>`

Overrides the TCP port to use. If a port is specified, the `--encrypt` option does not set a port.

`--path <path>`

Specify the root-relative path for the connect URL. The default is 'zarafa'. You don't need to specify leading and/or trailing slashes.

2.6.3. Exchange (MSEMS)

`-m (--mailbox) <smtpaddr|authid|name>`

Name of mailbox that is to be used as primary mail account in the profile. Note that the tool has no means to limit the addressbook lookup to certain fields (SMTP, AuthID or such), so be prepared to handle ambiguities. It's advisable to use SMTP addresses here since they are guaranteed to be unique across an organization.

`-s (--server) <hostname|ip>`

Specify which Exchange server to connect to. Mandatory, for now.⁹

`-e (--encrypt)`

Requests encrypted communication to the Exchange server (using the SSL protocol). Setting is not guaranteed to have any effect, subject to policies or server settings.

`-x (--cache)`

Requests a profile in "Cached Mode". Setting is not guaranteed to have any effect, subject to policies or server settings.

`--anywhere`

This option additionally allows a connection mode known as "RPC over HTTP(S)".¹⁰ This option allows some more detail options related to the "Outlook Anywhere" feature:

`--https`

Forces the RPC over HTTP(S) connection to be encrypted, effectively disabling HTTP.¹¹ If a HTTPS connection cannot be established, Outlook must refrain to pure RPC over TCP, or entirely refuse to connect.

⁹ Outlook Profile Mechanics does not use any of the "autodiscovery" functions of Exchange Server.

¹⁰ Outlook Profile Mechanics can't force the use of a particular connection mode; finally Outlook will decide which connection to use. Using Outlook's connection mode dialogs, you can't force that either.

¹¹ Note that this option is different and independent from the `--encrypt` option which only forces the use of SSL encryption in RPC over TCP connections.

--principal

Check if the server certificate is issued to the given principal, and refuse the connection if not.

--proxy

When using RPC over HTTP(S), connect to a different host than the one already named by the --server option.

Additionally, there are two more options related to the Outlook Anywhere feature. Usually you will leave them at the default values proposed by Outlook, but if you want them to change it is most likely you want to do that once for your whole organization, so the entries in the INI or config file seem sufficient:

```
[Exchange]
; [hardcoded default] {EFNH} try HTTP first on fast networks
TryHTTPonFastNet = 'no'

; [hardcoded default] {ESNH} try HTTP first on slow networks
TryHTTPonSlowNet = 'yes'
```

2.7. Options related to the use of an LDAP address book

While creating a profile, Outlook Profile Mechanics can add an additional address book that refers to an LDAP directory. The following options can be used:

--add-ldap-ab

This option requests that an LDAP addressbook be added to the given profile. Without this option, the remaining options related to LDAP don't have any meaning and won't even be syntax-checked.

--ldap-hostname <hostname|ip>

The host to contact.

--ldap-port <portnumber>

The TCP port to use. If you don't specify this value it will be chosen according to the SSL option: either '389' for unsecure or '636' for secure connection.

--ldap-ssl

Requests that the connection to the LDAP server be encrypted. Note that in absence of this option, or if set explicitly to off, Outlook will try an encrypted connection if an unencrypted connection attempt doesn't succeed. So the correct meaning of this option should read "don't allow unencrypted connections".

--ldap-auth

This switches authentication on. With this switch, the following two options will become relevant.

--ldap-user <username>

The user name to use when authenticating against the LDAP server. Note that we

don't provide a means to specify a password here. Outlook will prompt for a password and store it in the profile in an obfuscated way.

--ldap-use-spa

Requests that authentication should be done via the so-called “secure password authentication” scheme.

--ldap-display-name <string>

This sets the name by which the directory will be shown in the addressbooks list in Outlook. If this is not specified, Outlook Profile Mechanics will use the server name instead.

--ldap-timeout <seconds>

Sets the maximal amount of time the client should wait for an answer from the LDAP server.

--ldap-max-entries <number>

This specifies the maximum number of result entries.

--ldap-search-base <DN>

With this option, you can specify a different search base in the event that Outlook uses wrong assumptions about this LDAP server, or if you want to override the default base DN that was returned by the server.

--ldap-browsing

Allows Outlook to try to present the full contents of the LDAP directory in a tabular way. This needs support from the server side, so even if you switch it on it is not guaranteed to succeed.

--ldap-query <query-string>

With this string, you can request a different query string, thus fine-tuning the matching algorithm for searching and/or browsing.

Note that the use of this feature can impose some limitations:

- You may have to experiment with suitable “search base” and “search query” settings if the defaults chosen by Outlook's LDAP client don't yield the desired results.
- You can't set broader limits than the LDAP server imposes to you. This applies to the max results count, the allowance to browse, and the fields the server allows you to retrieve at all.
- You can't override the search scope and the comparison operators the server allows.

3. Initialization/Configuration files

Initialization and configuration files use the same format. The format specification is the

same as used by Windows and lots of other Windows applications.¹²

To get an overview of all variables that are in use by Outlook Profile Mechanics, simply invoke

```
OLKPMECH --print-defaults >olkpmech.ini
```

and open the resulting INI file in a text editor. With the above example, you'll have created an initialization file that can be immediately used if it has the name of the executable and resides in the same directory.

3.1. Alternate configuration file sections

There's a concept of one "primary" and several "additional" profiles, see the description of the `--add` option. In an initialization/configuration file, you can prepare different default values that get applied depending on the presence of the `--add` option.

Let's show that for a simple option: the `--remove-all` option. For creation of a single profile, it is normal that all pre-existing profiles can be removed. But as soon as you want to create additional profiles you definitely have to keep profiles already present in the system. So we want to have a different default for the `--remove-all` option: `TRUE` for a primary profile, but `FALSE` for any other ones.

A primary profile is created without the `--add` option, and the corresponding `.INI` file should have at least an entry like this:-

```
[Profile]
DeleteAllProfiles = yes
```

Now to an additional profile. The tool provides the concept of "alternate sections" that are named just like normal sections but with the string "Alt:" prepended. For our example, this would look like:-

```
[Alt:Profile]
DeleteAllProfiles = no
```

This value would be in effect whenever the tool is invoked with the `--alt` option.¹³

12 The format is widely known as the "WIN.INI" format, structured into [Sections] and "variable = value" pairs. Outlook Profile Mechanics uses the same interface that Windows uses to read these files, so you may refer to your system documentation to get the details.

13 Note that even if the `--alt` option is in effect, the tool would always read the normal sections first, so your "Alt:..." sections are only required to hold values that differ from the defaults. You may watch the flow of variable parsing if you invoke `OLKPMECH` with the `--dry-run` and `--verbose` options.