The AxCrypt Command Line

This section is for system administrators, programmers and other advanced users.

AxCrypt may be called by other programs, or manually, by specifying command-line arguments. The general syntax is:

AxCrypt [-i [.ext] | p | u | x] | [-l] | [-b tag] [-f] [-c] [-g] [-n filename] [-m] [-e] [-a | -k "passphrase"] [-O path2exe] [-z | d | o | w | s | q | h | J file(s)] [-t [tag]] | file(s)

Except for -i -p -u -x, the options are interpreted sequentially and may occur multiple times if it makes sense.

The options and their meanings are:

-i [.ext]	Install	Set all registry values to default. Set the extension to associate with AxCrypt - default is .axx.
-p	Psp test	Test for the need to install psapi.dll. Only relevant on NT. If return code is 0, no need. This is an installation helper function only.
-u	Uninstall	Clear all registry values.
-x	eXit	End the resident server process, if loaded.
-l	License	Start the license manager dialog.
-b tag	Batch id	Define a tag, or batch id, to be used with subsequent pass phrases. These pass phrases will only be used when the same tag is specified in future calls to AxCrypt. The batch id is a decimal non-zero positive 32-bit signed integer. Odd values are reserved for internal use. If no -b option is given, saved pass phrases are 'global'. All tagged pass phrases are saved until cleared with -t.
-f	Toggle Fast mode	Will modify certain operations to execute fast, rather than safe and/or secure. There is no guaranteed effect. Initially off.
-c	Toggle Copy-only flag	Causes subsequent -d and -z to retain the originals. May be combined with -f for fast copy without wiping of temporaries. Initially off.
-g	Toggle ignore encrypted flag	If set, attempted encryption of already encrypted files will do nothing. Initially off.
-n	Output Name	Defines a file name to be used as output instead of default for the next -z or -d.
-m	Toggle recurse flag	If set, causes subsequent wild card file names to search into sub-directories. Initially off.
-e	Encryption pass phrase definition	Subsequent -a or -k options on this invocation define the default encryption key instead of one of possibly many decryption keys. The -b option may be used to define pass phrases with limited context.
-a	Add pass phrase	Prompt for a pass phrase using the AxCrypt standard safe dialogues. -b and -e may be used as modifiers.
-k "pass phrase"	Cache pass phrase	Cache the given pass phrase, quotes are recommended. The pass phrase is case-sensitive. -b and -e may be used as modifiers.
-O "Path2Exe"	Set Open Executable	Modify a subsequent -o (Open for edit) to use the specified executable instead of the automatic association by extension.
-z	encrypt	Encrypt (and if useful compress) the given file(s) with either the current default encryption key, or with one that is prompted for.

		The originals are wiped. -b, -c, -g, -f and -n may be used as modifiers.
-J	self-decrypt encrypt	Encrypt (and if useful compress) and copy the given file(s) with either the current default encryption key, or with one that is prompted for to a self-decrypting executable archive. -b, -g and -n may be used as modifier. Default is to ignore files that already are self-decrypting.
-d	Decrypt	Decompress and decrypt the given file(s) with either a cached key, or with one that is prompted for. -b, -c, -f and -n may be used as modifiers.
-o	Open	Open the given file(s) with the appropriate application after temporary decryption and decompression. If they are modified after application exit, they are re-encrypted with the same pass phrase. -b may be used as modifier.
-w	Wipe	Wipe the given files and delete. Show a confirmation warning first.
-s	wipe Silent	Wipe the given files and delete, but do not ask for confirmation.
-q	Query pass phrase cache	Return exit code 0 if all files given have pass phrases in the cache already. -b may be used as modifier.
-h	Anonymous rename	Renames the given file(s) to anonymous names. The original names will be restored on decryption.
-t	Clear pass phrase cache	Clear the internal pass phrase cache. If -b is given, only pass phrases associated with that tag are affected, otherwise all are removed, tagged and un-tagged alike.

If no options are given but just file(s), they are opened as with -o. Otherwise the most recent -z, -d, -c, -o, -w, -s or -h determines the operation performed on the file.

The first time AxCrypt is started, a server process is initiated which will run until terminated. It's within this process that the pass phrase cache is kept, in a secure manner.

All operations are 'waitable', and will return a non-zero exit code on error.

The 'flag' options are important to specify before the operations they intend to modify, parameters are parsed and executed sequentially as the appear on the command line. Only operating system restrictions on command line lengths limit the number of operations on a single line. If any operation returns an error, the rest of the command line is ignored, and that error is returned as exit code.

Standard wild cards are accepted for all file specifications, except for Open. If the recursion flag is enabled, sub-directories will be searched too.

If you need to do several operations, and keep them together, without affecting the "global" pass phrase cache, use the -b option with an arbitrary tag as described above. Deriving one from the time of day may be appropriate for example. The -b option is valid over multiple calls to the server process, as long as it's not restarted.

Examples

As the command line is made for programmatic access, the usage is not really intuitive so here follows some examples which can be executed as a sequence, which assume that AxCrypt is installed in a typical standard location and that the current directory contains a file named `secrets.txt` (test this with non-vital data please):

```
@ECHO ON
REM Encrypt secrets.txt with the given passphrase, but do not remember this
passphrase
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -e -k "A Secret Phrase" -z
secrets.txt

REM Decrypt secrets.txt, but prompt for the passphrase
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -d secrets-txt.axx

REM Clear the passphrase cache of the default phrase (and all other cached
phrases) for batch id '2'
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -t

REM Load the passphrase cache with a default encryption phrase using the standard
dialog
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -e -a

REM Encrypt secrets.txt with the default encryption phrase just entered
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -z secrets.txt

REM Decrypt secrets-txt.axx
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -d secrets-txt.axx

REM Clear the passphrase cache of the default phrase (and all other cached
phrases)
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -t

REM Encrypt to a self-decrypting copy of the original and clear the cache
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -e -k "A Secret Phrase" -J
secrets.txt

REM Encrypt and copy to a regular encrypted file, but keep the passphrase in the
global cache
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -e -k "Another Secret" -c -z
secrets.txt

REM Shred the original with an interactive warning
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -w secrets.txt

REM Shred the self-decryping file with no interactive warning
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -s secrets-txt.exe

REM Open the file file with notepad or whatever is used for .txt-files
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" secrets-txt.axx

REM Decrypt back to secrets.txt, using the cached phrase
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -d secrets-txt.axx

REM Clear the passphrase cache again
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -t

REM Encrypt all files in the current and sub-directories, and do it fast but just
deleting originals etc (i.e. faster)
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -e -k "A Third phrase" -m -
f -z *.txt

REM Rename all just encrypted files to anonymous names
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -m -h *.axx

REM Decrypt them all again, and clear the cache (batch id 2)
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -b 2 -m -f -d *.axx -t

REM Request that the resident process ends itself, and exits
```

```
"%ProgramFiles%\Axon Data\AxCrypt\1.6.1\AxCrypt" -x
```

Please note that for the passphrase cache to work as implied above, you need to check the appropriate options for keeping the passphrase in the cache when the interactive dialog is displayed. Also please note that you may need to use Alt-Tab to find the passphrase dialog when this is run from a command line window due to Windows design constraints.