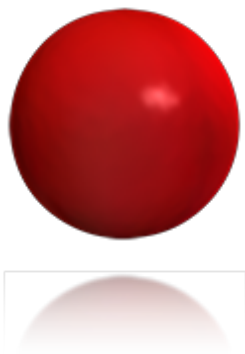# Lingon

by Peter Borg

tuppis.com/lingon

Introduction

Lingon is a graphical user interface for creating an editing launchd configuration files for Mac OS X Leopard 10.5. You can use launchd on a Mac to launch scripts and applications whenever something special happens, at a specific time or periodically. You get all launchd configuration files in a list to the left so you can easily see all and choose which one to edit.

Editing a configuration file is easier than ever in this version and it has two different modes. Basic Mode which has the most common settings readily available in a very simple interface and Expert Mode where you can add all settings either directly in the text or insert them through a menu.

launchd

create

Creating a launchd configuration file might seem daunting when one hears about it but it really is easier than one first imagines it to be. In Lingon you can just choose New and then choose My Agents if you are not sure about the three options. Then just fill out each of the three steps. In step three (When) you choose more than one option but usually it only makes sense to use one.

You can find out more about launchd and the changes to it in Leopard by watching a talk held by the developer of launchd: link

This is not the place to include a full tutorial and guide on how to write a configuration file for launchd but I can recommend that you first take a look at the man-pages that are linked in the Help-menu and then there are links where you will find more information:

http://developer.apple.com/macosx/launchd.html

http://www.afp548.com/article.php?story=20050620071558293&query=launchd

http://www.macgeekery.com/tips/all_about_launchd_items_and_how_to_make_one_yourself

http://data.scl.utah.edu/fmi/xsl/stream/details.xsl?-recid=200&a::v=EyaO944i72

http://www.macgeekery.com/tips/some_launchd_recipes

http://en.wikipedia.org/wiki/Launchd

http://www.mactech.com/articles/mactech/Vol.21/21.06/launchd/index.html

http://developer.apple.com/technotes/tn2005/tn2083.html

view

The folders where the configuration files exists are:

My Agents - <your home folder>/Library/LaunchAgents

Users Agents - /Library/LaunchAgents

Users Daemons - /Library/LaunchDaemons

System Agents - /System/Library/LaunchAgents

System Daemons - /System/Library/LaunchDaemons

The difference between an Agent and a Daemon is (to put it slightly over-simplified) that a Daemon runs when the system starts up (and generally runs as root) and an Agent runs whenever someone logs in.
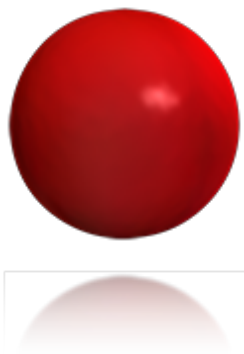
editing

Lingon shows in the Basic Mode only a small subset of all options in a launchd.plist and if you want to add more options you need to switch to Expert Mode by pressing the button in the bottom right corner or choose the command in the View menu. You can of course also open the plist in a text editor of your choice (I recommend, of course, Smultron); you can find the plist by choosing Show in Finder in the File menu.

In Basic Mode Lingon preserves all original settings that are not being edited by you or that does not exist in that interface, so you need not worry that Lingon destroys any extra settings you might have.

In Expert Mode you can either write the keys and values yourself or you can choose (in the top right corner) the parameter which you want to insert. Note though that Lingon only gives an example of how one can write the value, many parameters can be written in several different ways so it is always recommended to consult the launchd.plist man page (which you can find in the Help menu).

In Expert Mode Lingon also validates it as a plist all but please note that even though it is a valid plist it does not necessarily mean that all settings in it are correct for launchd (but it does need to be a valid plist for it to be even considered by launchd). Please consult the man pages (in the Help menu) if you are at all uncertain about it.

Preferences

check for updates

If you are connected to the internet and the chosen time period has not elapsed, it will check if there's a newer version of Lingon when it starts up, and if so, present you with a choice to download it

list font size

Choose between 11 and 13 points as the font size for the list

text font

The font which is used in the man pages and in the Expert Modes

reset all warnings

This turns on all warnings again if you have chosen to turn any of them off, should you want to see them again

FAQ

what is it?

Lingon lets you edit and create configuration files for launchd

requirements?

Mac OS X Leopard 10.5 or later

the name?

Lingon is the Swedish name for lingonberry and hence the icon

why have you written it?

It has been more complicated than it should have to be to create and control the configuration files for launchd and my humble hope is that now people can discover how great launchd really is for Mac OS X

how to uninstall it?

Drag Lingon.app to the trash, and you can find the preference file at <your home folder>/Library/Preferences/org.lingon.Lingon.plist.

why are there changes and less functionality from version 1.x:

Because of changes to launchd in Leopard (e.g. new elements and the changes to per-user and per-session) it has seemed to me that any interface which would include everything would become hopelessly complicated and, even more importantly, the risk of a user who does not know everything about launchd making mistakes and therefore cause problems would be too great in my opinion. So therefore it is better to log out or restart the computer after changes, even though it might seem as a hassle for the us users. But I am all the time thinking about ways to improve the experience for the users so something might appear in the future. And I would

recommend everyone who has an interest in launchd and the changes in Leopard to take a look at the talk that the developer of launchd held at Google: link

how to translate lingon into my own language

You need first of all to install the Developer Tools. Then download the source code from the site. Choose English.lproj from the folder and copy it onto the desktop. Rename it to your language (the easiest way to know exactly what name it should have is to look inside another application that you know already has support for your language).

Then open the Localizable.strings in a text editor (and make sure that it opens with text encoding Unicode UTF-16) and translate the right side of every string (you'll see things like %2$@ and you need to keep them in the string as that is the code to insert e.g. a filename). Then open all .xib files in Interface Builder and translate all text to your language and make the necessary adjustments.

You only need to translate LINMainMenu.xib and LINPreferences.xib.

You can send the finished translation to me (the email address can be found in About Lingon) and I'll include it with the next release.

where is the source code?

http://tuppis.com/lingon

where can I find the latest version of Lingon?

http://tuppis.com/lingon

Troubleshooting

First make sure that you are running the latest version. Go to http://tuppis.com/lingon and check to see if you have the latest version. Then you can check to see if you have any Input Managers installed. Check the following directories:

- /Library/Application Support/SIMBL/Plugins/

- Library/InputManagers

- <your home folder>/Library/InputManagers

and try to disable any there and restart Lingon and see if the problem persists.

If that doesn't help you can try to move aside (e.g. move temporarily to the desktop) the Lingon preference file so every setting will be reset to the default:

- <your home folder>/Library/Preferences/org.lingon.Lingon.plist

If nothing works you can try to download a fresh version of Lingon from http://tuppis.com/lingon to make sure that the application hasn't been damaged in any way.

You can also check to see if it's a known bug at http://sourceforge.net/tracker/?group_id=151459&atid=784049 and if I'm working on a fix. And, if not, you can email me (the address is in About Lingon) or you can file a new bug at that page.
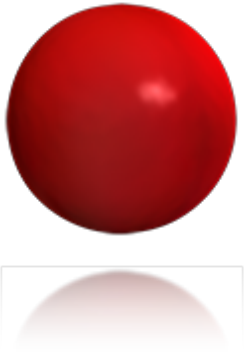
Thanks to...

localisations

Swedish   Peter Borg

History

2.1.1

Fixed an issue with Mac OS X 10.5.6

2.1

Added Expert Mode where all parameters can be set

Added Swedish localisation

Updated the appearance

Some small fixes

2.0.2

Some bug fixes

2.0.1

Fixed a potential crash

2.0

Only for Leopard

New, easier user interface

Some other small improvements

1.2.1

Some small changes

1.2

Resolution independent

New icons

Fixed an issue when selecting an application containing a space in the assistant

Fixed possible temporary hang at start

Some other small fixes

1.1.3

Fixed a bug which would show an incorrect error when saving

1.1.2

Various small bug fixes

1.1.1

Some small improvements

Some small bug fixes

1.1

Added Delete

Added Move

Added Change Filename

Added Open In External Editor

Added drag and drop to import, export, delete, move and open externally

One can now drag and drop a command to ProgramArguments

One can now drag and drop from ProgramArguments to test it in e.g. Terminal

Added reordering of values in tables

Added many keyboard shortcuts

One can now change the font in text views

Many other fixes

Many other interface improvements

Updated the appearance

1.0.2

Fixed an issue when using FileVault

Some other small improvements

1.0.1

Handles malformed plists more gracefully

Better handling of volumes that does not support priviledged helper tools

Now honours the system settings for automatic deauthorisation

Some small improvements

1.0

Some small fixes

0.9.2

You now only need to authenticate once every five minutes

Made sure that all values set are actually saved

Made sure that all integers are saved as integers

Some other small changes

0.9.1

Fixed a bug if one chose not to authenticate

Some other small changes

0.9

First public release