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# **relo Documentation**

***Release 0.5***

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September 16, 2011



# CONTENTS



Relo is a simple, lightweight and extensible Search tool and framework for [Python](#). It is distributed as a single script `relo.py` and a library that can be used in other python apps.

- **Content Search:** Search files recursively search a folder, with all its containing files, for a certain string.
- **Name Search:** Search filenames recursively in a certain folder.
- **Regex:** Use Regular Expressions to extend and improve search.
- **Plugins:** Manage and use Plugins to implement support for additional doctypes.

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**Note:** The Relo library doesn't actually return any results yet it just prints them out. Things like this will be implemented before the final stable version.

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### Example: simple relo library

```
from relo import Relo
```

```
search = Relo(debug=False, hidden=False, content=True, recursive=True, directory='./', key='example')
search.list()
search.start()
```

Run this script or paste it into a python console, then watch the results come in.

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**Note:** More control can be achieved by using the `relo.core` library.

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### Download and Install

You can use `easy_install` or `pip` as usual:

```
easy_install relo
pip install relo
```

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**Note:** Still not fully tested!

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### Dependencies

Relo needs the `argparse` library for parsing arguments. Furthermore some of the plugins need libraries that help in loading and reading different kinds of files. As of now these libraries are:

- **PyPdf:** Needed for reading pages from pdf files

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**Note:** The dependencies don't install automatically when installing relo for now, some issues wrapping my head around `setup.py`. Will be fixed soon.

```
easy_install pypdf
pip install pypdf
```

When `argparse` doesn't come with your python version installed.

easy\_install argparse

pip install argparse

---

# USAGE GUIDE

Start here:

- **Learn:** how to use the relo library or the relopy script.
- **Contribute:** to the project.
- **Contribute (DocType)** and add additional doctypes.

## 1.1 ReloPy

This tutorial introduces you to the relopy script which makes it easy to search your computer for anything you like.

**A quick overview:**

- [Installation](#)
- [Simple start](#)
- [Complex approach](#)

### 1.1.1 Installation

You need argparse and PyPdf installed for relopy to work correctly. ReloPy is available with the Relo library on PyPi

```
$ sudo pip install relo          # the recommended way
$ sudo easy_install relo         # the alternative that works most of the time
```

You will need Python 2 installed, I recommend Python 2.7 but you should be fine with anything from 2.3 up.

Furthermore I recommend on always using [virtualenv](#)

### 1.1.2 A simple start

After everything is [set up](#) you can do a quick search to verify everything works.

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**Note:** These are all non-recursive examples for recursive ones look [here](#).

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### Simple filename search

In your home directory:

```
$ relop test
```

or

```
$ relop -n test
```

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**Note:** You can use both here since filename search is the standard search.

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After a short amount of time it will print out all the matching files.

### Simple file content search

In some other directory then your home directory...

```
$ relop -c test
```

This will look through the files that are in your home directory and print out any results.

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**Note:** As of now only files that are supported are being searched, this will be changed in the future.

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## 1.1.3 A more complex approach

### The possibilities

For a quick check on what you can do and what options are available run:

```
$ relop -h          # short
$ relop --help      # long
```

### The arguments

- **Recursive (-r):** search directories recursively
- **Hidden (-a):** search even hidden files
- **Debug (-debug/-verbose):** Print out debug/verbose information (not implemented yet)
- **Directory (-d):** Select directory to search in



# INFORMATION BASE

A database for tutorials, guides and other links that relate to relo.

## 2.1 Frequently Asked Questions

### 2.1.1 About Relo

#### Is Relo efficient and fast enough to use in my own app

Relo is still being developed so it is not fully stable. Most importantly the speed always depends on what you are searching:

- Are you doing a Name or Content Search?
- How many files are there?
- How big are those files?

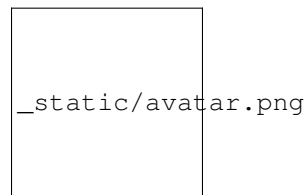
### 2.1.2 Common Problems

#### Relo doesn't find anything in my PDF file

Relo uses the PyPdf library. As of now its using a function that help extract text out of a pdf, unfortunately this function doesn't always work. For some PDFs it returns an empty string and therefore relo itself can't find anything.

## 2.2 Contact

### About the author



Hello, my name is *Cecil Woebker* (aka *cwoebker*), author of [Relo](#). I'm 16 years old and originally from Germany. But now I am visiting a high school in the United States. Python is my favorite language, but I also code in c++ and html/css. Watch me on [twitter](#) or visit my profile at [GitHub](#) to get in contact just email me at [cwoebker@gmail.com](mailto:cwoebker@gmail.com).

### About Relo

Relo is my first open source project. I started it because I felt like there wasn't an easy way to search my own computer efficiently. At the beginning Relo was just a tool for myself, but then I open sourced it at [GitHub](#) and transformed it into a library that others can easily use in their own python app.

# DEVELOPMENT AND CONTRIBUTION

These chapters are intended for developers interested in helping with the development process.

## 3.1 Release Notes and Changelog

### 3.1.1 Release 0.6 (2011 Sep 16)

#### New Features

- **Documentation:** As part of this release the documentation will be implemented.
- **All option:** Search files even without a DocType plugin file.
- **Hidden option:** What used to be called –all will now be a real hidden option to search hidden files.
- **Specific File Search:** Search specific file types as long as there is a DocType.
- **Dynamic DocType loading:** DocType plugins are loaded only if needed.

#### Improvements

- **Website improvement:** Website renewed.

#### DocType

- some minor improvements

### 3.1.2 Release 0.5 (2011 Aug 10)

#### New Features

- First release to be published on [PyPi](#).
- Renamed project from pysearch to relo.
- Completely updated project structure for better support as a library.
- relo.py script was renamed to relopy (without an ending).

## **Improvements**

- Nothing major here since Relo is still in early development although its already beta.

## **DocType**

- No new DocTypes were implemented.
- Pdf DocType was improved significantly.
- Some minor changes to all DocTypes.

## **3.1.3 Earlier Releases (PySearch)**

### **0.4 beta (2011 Aug 9):**

- implement doctypes for pdf (and chm if easily possible)
- fork own plugin framework based on yapsy and fit it to pysearches needs
- recursive search option, disabled by default

### **0.3 alpha (2011 Aug 3):**

- Regular Expression Search
- Changed to Yapsy

### **0.2 alpha (2011 Aug 1):**

- Implement different types of searches:
  - File name search
  - Content search
- Implement option to search hidden files

### **0.1 alpha (2011 Jul 31)**

- Initial Public Release
- Implemented Basic Plugin System for different document types.
- Supported DocTypes:
  - (.txt) Normal Text Files
  - (.log) Logging Files

## 3.2 Roadmap

### 3.2.1 Release 0.7

#### New Features

- **Logging:** A logging class to implement debugging mode and other features.
- **DocType Managing:** Install, remove, update and find DocTypes.
- **Missing DocType:** Notify user when a plugin is needed but available.
- **Relo Updater:** You can update the relo library from within relopy itself.
- **Relo Extensions:** add extensions - thrid party - with updater
- **Symbolic Links:** Search through directories/files that are being linked symbolically. **IN PROGRESS (Python link support problem), postponed**

#### Improvements

- **Progress Bar:** There is now a progressbar to display how much of the search is done.
- **Relo Colorful:** (Maybe) Colors for better information flow:
  - **Error:** Red
  - **INFO:** White
  - **DEBUG:** Yellow

#### DocType

- **Microsoft Html Help (.chm):** Add support for Microsoft HTML Help files. **postponed**

### 3.2.2 Release 0.8

#### New Features

- **Graphical User Interface (GUI):** A User interface in wxPython, PyQt4 or whatever fits best.
  - **Settings and Defaults:** Settings and Defaults stored in ~/.relo(py) .
  - **Plugin Manager:** Control the Plugin Manager from the GUI.
  - **MenuBar Icon:** Make relopy easily accessible through the menubar.

#### Improvements

- **Index DB:** relo created db files for faster searching, either when set or when already searched.

DocType

### 3.2.3 Release 0.9

New Features

Improvements

DocType

### 3.2.4 Release 1.0

New Features

Improvements

DocType

### 3.2.5 Future

Indexing of files for faster search index db generation one time, then changes performance needed code in C

More DocTypes

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# CONTACT

Email me at [cwoebker@gmail.com](mailto:cwoebker@gmail.com)  
or check the *Contact* page



# INDICES AND TABLES

- *genindex*
- *modindex*
- *search*



# PYTHON MODULE INDEX

**r**

relo, ??