catsup Documentation

Release 0.2.0

whtsky

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CONTENTS

Catsup is a lightweight static website generator which aims to be simple and elegant.

USER'S GUIDE

1.1 Installation

If you are familiar with Python, it is strongly suggested that you install everything in virtualenv.

If you are using OS X , make sure you have installed the *Command Line Tools* .

1.1.1 Install using pip

Install catsup via pip is easy

```
(sudo) pip install catsup
```

1.1.2 Upgrade from older version

It's also easy to upgrade your catsup

```
(sudo) pip install catsup --upgrade
```

1.1.3 Install with Git

Install with git can always have the latest code

```
git clone git://github.com/whtsky/catsup.git
cd catsup

# We use git submodules to organize out theme.
# If you don't want the default theme(current version is sealscript)
# You can skip these command.
git submodule init
git submodule update

python setup.py install
```

1.1.4 Cann't find Python.h ?

Catsup uses misaka as the markdown engine.It requires C compiler.On Ubuntu, you may run

```
(sudo) apt-get install python-dev
```

1.2 Get Started

This section needs you have Catsup installed.If you don't, please go and *Install it*

1.2.1 Create a new site

It's pretty simple to create a site using Catsup

```
$ mkdir site
$ cd site
$ catsup init
```

Let's see what happened

```
$ ls
config.json posts
```

After running `catsup init`, Catsup generates a sample config file `config.json` and an empty post folder `posts`.

Now, let's configure your new site.

1.2.2 Configure your site

Catsup can be highly customized, but you only need to change a few variables to get started :

- `site.name` : Name of your site
- `site.description` : Description of your site
- `site.url` : Your site's URL. Like `http://example.com` or `http://example.com/site`
- `author.name` : Your nickname

Want to learn more about configuration file? Take a look at *Configuration*

After configuring your site, it's time to start writing.

1.2.3 Write posts and pages

Let's write a post first

```
vim posts/hello-world.md
```

a Hello World post looks like

```
# Hello, World!

- time: 2013-08-25 23:30
- tags: hello world


---
```

```
Hello, World!
This is my first post in catsup.
I'm writing in **MarkDown** !
<strong>HTML is supported, too</strong>

```python
print("I love python")
```
```

Then, let's write a page to talk about your site

```
vim posts/about.md
```

a About page looks like

```
# About the site

- time: 2013-08-25 23:31
- type: page


----

Hi!
This site is generated by [catsup](https://github.com/whtsky/catsup).
```

Read about *Post Syntax* to learn more.

1.2.4 Build your site

After writing posts and pages, It's time to build your site and let everyone know!

But don't hurry, let's take a look at your site first

```
catsup server
```

Then open your favorite web browser, go to http://127.0.0.1:8888 .

Head over to *Preview Server* to know more.

After making sure everything's all right, let's build the site

```
catsup build
```

Let's see what happened

```
$ ls
config.json deploy posts
```

1.2.5 Deploy your site

Deploy to GitHub Pages

Thanks to GitHub, we have a perfect place to host our site.

You need to have a repo called *YOUR_GITHUB_USERNAME.github.io*. If you don't, go to create one

Then edit your configuration file, change `deploy` section like this

```
"deploy": {
    "default": "git",

    "git": {
        "repo": "git@github.com:YOUR_GITHUB_USERNAME/YOUR_GITHUB_USERNAME.github.io.git",
        "branch": "master",
        "delete": true
    }
},
```

replace `YOUR_GITHUB_USERNAME` with your github username, like `whtsky` .

After that, let's deploy your site to GitHub Pages

```
catsup build && catsup deploy
```

Then open http://YOUR_GITHUB_USERNAME.github.io to enjoy your fresh site.

Deploy to your own server

Catsup also supports deploy via rsync. Before continue, make sure you have rsync running on your server.

Then edit your configuration file, change `deploy` section like this

```
"deploy": {
    "default": "rsync",

    "rsync": {
        "ssh_port": 22,
        "ssh_user": "USER_NAME_HERE",
                    "ssh_host": "IP_ADDRESS_OF_YOUR_SERVER",
        "document_root": "DEPLOY_TO_WHICH_PATH",
    }
},
```

Here's an example

```
"deploy": {
    "default": "rsync",

    "rsync": {
        "ssh_port": 22,
        "ssh_user": "whtsky",
                    "ssh_host": "whouz.com",
        "document_root": "~/whouz.com",
    }
},
```

After that, let's deploy your site via rsync

```
catsup build && catsup deploy
```

Head over to *Deploy Support* to know more.

1.3 Post Syntax

1.3.1 Overview

A post's extension should be either `.md` or `.markdown`.

A sample post looks like

```
# Hello, World!                         <---- This is title

- time: 2013-08-25 23:30                <---- This is meta
- tags: hello world

---

Hello, World!                           <---- This is content
This is my first post in catsup.
I'm writing in **MarkDown** !
<strong>HTML is supported, too</strong>

```python
print("I love python")
```
```

A post consists of three parts:

- Title
- Meta
- Content

1.3.2 Title

Title should always on the first line and starts with #

1.3.3 Meta

Meta is some information about the post. It's below title and above the separator.

- time: When the post is written. like `2013-08-25 11:10`
- tags: Tags of the post. Separated by comma, like `Python, Program`
- type: Set to `page` to turn this post into a page.
- description: Description of the post.
- comment: Set to `disabled` to forbid comment
- permalink: Permalink to the post, link `/this-post`

1.3.4 The separator

The separator separates meta and content. It should be at least *three* –

```
---
```

It's okay to make it longer

1.3.5 Content

Everything below the separator is the content. Content should be written in Markdown.

1.3.6 Code Highlight

Catsup supports GitHub's style code highlight, like this

```python
```python
print("Hello World!")
```
```

1.3.7 Page

Page is a kind of post. Turn an ordinary post into page by adding `- type: page` in post's meta.

So, what's the difference between page and post?

- Page do not have tags
- Page do not display in Archives Pages and Index Pages
- In general, pages will be linked in every page's navigation.

1.4 Configuration

Catsup's configuration file is a vaild JSON file.

1.4.1 Overview

The default config file looks like :

```json
{
    "site": {
        "name": "blogname",
        "description": "Just another catsup blog",
        "url": "http://blog.com/"
    },

    "author": {
        "name": "nickname",
        "email": "name@exmaple.com",
        "twitter": "twitter"
    },

    "config": {
        "source": "posts",
```

```
        "output": "deploy",
        "static_prefix": "/static/",
        "analytics": ""
    },

    "permalink": {
        "page": "/page/{page}/",
        "post": "/{title}/",
        "tag": "/tag/{name}/",
        "tags": "/tag/index.html",
        "archive": "/archive/{year}/",
        "archives": "/archive/index.html",
        "feed": "/feed.xml"
    },

    "comment": {
        "allow": true,
        "system": "disqus",
        "shortname": "catsup"
    },

    "deploy": {
        "default": "rsync",

        "git": {
            "repo": "repo url here",
            "branch": "master",
            "delete": true
        },

        "rsync": {
            "ssh_port": 22,
            "ssh_user": "username",
            "ssh_host": "123.45.6.78",
            "document_root": "~/website.com/",
            "delete": true
        }
    },

    "theme": {
        "name": "sealscript",
        "vars": {
            "description": "a blog",
            "github": "whtsky",
            "links": [
                {
                    "name": "catsup",
                    "url": "https://github.com/whtsky/catsup",
                    "description": "Awesome!"
                }
            ]
        }
    }
}
```

1.4.2 Site & Author & Config

It's easy enough to configure these by yourself.

If you're using Google Analytics, remember to change `config.analytics`

```
"config": {
        "source": "posts",
        "output": "deploy",
        "static_prefix": "/static/",
        "analytics": "UA-33275966-1"
},
```

1.4.3 Permalink

You can easily change any page's permalink in `config.permalink`.

There are some permalink styles for posts you may like :

- `/{title}.html`

- `{filename}.html`

- `/{date}/{title}/`

- `/{filename}/`

- `/{date}/{filename}/`

- `/{datetime.year}/{filename}/`

Note that permalink defined in *Post Meta* will be used first.

For example, you defined your post permalink like

```
"permalink": {
    "post": "/{title}/",
    "feed": "/feed.xml"
},
```

And in your post, you defined a permalink in *Post Meta*

```
# About

- datetime: 2013-08-30 12:00
- type: page
- permalink: /about-the-site


-------

This is a about page
```

In the end the permalink of this page will be `/about-the-site`.

1.4.4 Comment

Catsup supports two comment systems: Disqus and Duoshuo

If you prefer Duoshuo to Disqus, just change your comment system to it

```
"comment": {
    "allow": true,
    "system": "duoshuo",
    "shortname": "catsup"
},
```

If you have your own shortname, remember to change `comment.shortname` to your own

```
"comment": {
    "allow": true,
    "system": "disqus",
    "shortname": "my_site"
},
```

If you don't want to allow any comment, just disable it

```
"comment": {
    "allow": false
},
```

If you just want some of the posts can't be commented, set `- comment:  disabled` in *Post Meta*

1.4.5 Deploy & Theme

It's easy enough to configure these by yourself.

For more information, read about *Deploy Support* and your theme's document.

1.5 Theme

1.5.1 Overview

Install a theme

```
catsup install git_repo
```

For instance, install Theme Clean

```
catsup install git@github.com:whtsky/catsup-theme-clean.git
```

Update a installed theme

```
catsup install theme_name
```

For instance, update clean

```
catsup install clean
```

List all themes installed

```
catsup themes
```

1.5.2 Structure

Catsup uses Jinja2 as a Template Engine.You need to learn it if you want to design your own theme.

You can learn how to design your theme by reading source:

- Theme Clean

- Theme Sealscript

A catsup theme should look like

```
-- README.md                       <-------- how to install/customize your theme.
-- static                          <-------- static files
|   -- css
|   |   -- pygments_style.css      <-------- catsup uses Pygments to highlight code
|   |   -- style.css
-- templates                       <-------- template files
|   -- 404.html
|   -- archive.html
|   -- archives.html
|   -- page.html
|   -- post.html
|   -- tag.html
|   -- tags.html
-- filters.py                      <--------- filters defined by theme
-- theme.py                        <--------- meta file
```

1.5.3 Meta File

A demo meta file

```
name = 'sealscript'
author = 'Lyric'
homepage = 'https://github.com/whtsky/catsup-theme-sealscript'
post_per_page = 3
vars = {
    "github": "whtsky",
}
```

A theme meta consists of :

- name

- author

- homepage

- post_per_page

- vars

1.5.4 Variables

Global Variables

- generator: Catsup's Generator instance.

- site: `site` in user's config file.

- author: `author` in user's config file.

- config: `config` in user's config file.

- comment: `commment` in user's config file.
- theme: `theme.vars` in user's config file.
- pages: All the pages of the current site.

Templatable Variables

Templatable variables are only accessed in specify templates.

- pagination: available in `page.html`
- post: available in `post.html`
- permalink: permalink of the current page

  ```
  <link rel="canonical" href="{{ permalink }}"/>
  ```

1.5.5 Built-in Functions

static_url

Static URL returns a static URL for the given relative static file path.

```
<link rel="stylesheet" href="{{ static_url("css/style.css") }}" type="text/css" />
```

url_for

url for returns the permalink of the given object or string

```
<a href="{{ url_for('index') }}">{{ site.name }}</a>

<a href="{{ url_for(post) }}">{{ post.title }}</a>

<link rel="alternate" type="application/rss+xml" href="{{ url_for('feed') }}" title="{{ site.name }}'
```

1.5.6 Filters

Every function in `filters.py` will be a filter.Catsup also has some build-in filter:

- xmldatetime

1.5.7 Template Marco

Catsup has some powerful marco to make your job easier

- render_comment(post): Render comment of the given post.
- meta(post): Render meta tags of given post.Should be used id `<head>`.
- analytics(): Render analytics code.

An example `post.html` template using built-in marco

```
<html>
    <head>
        <title>{{ post.title }}</title>
        {% from 'utils.html' import meta, analytics %}
        {{ meta(post) }}
        {{ analytics() }}
        <link rel="canonical" href="{{ permalink }}"/>
    </head>
    <body>
        <article>
            <h1>{{ post.title }}</h1>
            {{ post.content }}
            {% from 'utils.html' import render_comment %}
            {{ render_comment(post) }}
        </article>
    </body>
</html>
```

1.6 Goodies

1.6.1 Preview Server

Preview your site without deploy

```
catsup server
catsup server -p 8000
```

Preview server will regenerate your site when :

- Your source folder (`posts` by default) changes (Like add a new post or modify one)

- Your theme folder changes(Useful for writing themes for Catsup)

- Catsup program changes(Useful for writing codes for Catsup)

Note: Catsup will ignore `site.url` and build your site into a temporary directory when running Preview Server.

1.6.2 Deploy Support

Help you deploy your site via git or rsync

```
catsup deploy # Deploy via default way
catsup rsync # Deploy via rsync
catsup git # Deploy via git
```

1.6.3 Webhook

If you host your site's source on GitHub or Bitbucket, Catsup can generate your site when you push to your repo.

You need to clone your repo and start webhook server

```
git clone git://path/to/your/site.git
cd site
catsup webhook -p 12580
```

> **Attention:** Catsup webhook is not a daemon process.That means you may need to use Supervisor to turn it into
> daemon.

Then configure webhook on GitHub or Bitbucket. Here we use GitHub as an example:

- Go to the "admin" page for your project
- Click "Service Hooks"
- In the available service hooks, click "WebHook URLs"
- Type your url [1]
- Click "Update Settings"

Then when you push to GitHub, Catsup will pull and generate your site.

1.7 Upgrading to Newer Releases

Catsup itself is changing like any software is changing over time. Most of the changes are the nice kind, the kind where you don't have to change anything in your site to profit from a new release.

However every once in a while there are changes that do require some changes in your site.

This section of the documentation enumerates all the changes in Catsup from release to release and how you can change your site to have a painless updating experience.

If you want to use the *easy_install* command to upgrade your Catsup installation, make sure to pass it the `-U` parameter:

```
$ easy_install -U catsup
```

1.7.1 Version 0.2.0

Catsup adds an cache system since 0.2.0 .

Cache files are stored in `.catsup-cache` folder, so if you are using git to organize your site and want to ignore the cache files, add the following line to your `.gitignore` file

```
.catsup-cache
```

1.8 Changelog

1.8.1 Version 0.2.0

- Support generate sitemap
- Add *catsup watch* command
- Add *catsup clean* command

---

[1] If your server's ip is 1.2.3.4 , you can type `http://1.2.3.4:12580/webhook`

- Add cache for rendering markdown
- Add cache for `url_for`
- Add cache for `static_url`
- Use Jinja2's Bytecode Cache
- Don't generate analytics codes when running `catsup server`
- Display time cost for loading config and posts
- Change json engine to *ujson*

1.8.2 Version 0.1.0

- Use full md5 hash in `static_url`
- Add support for pages
- Build to tempdir when running `catsup server`
- Add `config.site.description`
- Use `config.comment.shortname` to replace `config.comment.disqus` and `config.comment.duoshuo`
- Regenerate the site when your theme or posts changed when running `catsup server`
- Use local static file when running `catsup server`
- Post per page is defined by theme
- Now catsup copy non-markdown files in source folder to deploy folder
- Drop summary support
- Drop escape markdown support
- Add sub path support
- Support customize any permalink
- Rewrite generator, parser and server
- Don't regenerate your site before deploy

1.8.3 Version 0.0.8

- Rewrite tag and archive code
- Add deploy support.(via git or rsync)

1.8.4 Version 0.0.7

Released on Feb. 7, 2013

- Add pagination for writing theme
- Rename excerpt to summary
- Add theme utils
- Support theme filters