

# TurboCMF

A lightweight framework for database-driven web applications.

# Presentation Overview

# High-Level Overview

# Technical Overview

# Gritty Details

# High-Level Overview

It's a framework.

Frameworks are good.



They make jobs easier.

(Leveraging existing code.)

Based on TurboGears 2.

Which is based on Pylons.

Which is based on Paster.

Which equals a lot of code you  
don't have to write yourself.

It's data-based, not code-based.

99% of things can be accomplished  
from the web interface.



No mucking about.

Getting off the ground is easy.

(One line in a terminal.)

Skinning is easy.

(A single template to modify.)

(Use CSS everywhere.)

Lots of standards to choose from.

# XHTML 1.1

<http://www.w3.org/TR/xhtml11/>



# XPath 1.0

<http://www.w3.org/TR/xpath>

# XInclude 1.0

<http://www.w3.org/TR/xinclude/>

# CSS

<http://www.w3.org/Style/CSS/>

# RSS & Atom

[http://en.wikipedia.org/wiki/RSS\\_\(file\\_format\)](http://en.wikipedia.org/wiki/RSS_(file_format))

[http://en.wikipedia.org/wiki/Atom\\_\(standard\)](http://en.wikipedia.org/wiki/Atom_(standard))

# Lots of other acronyms.

None of which really matter.

Everything is modular.

Everything.

Modular.



Really.

# Technical Overview

Everyone's favorite new acronym.

# WSGI

(We held this one in reserve earlier for greater impact.)

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Okay, yes, there's a lot of code.

Offers flexibility.

Lets you choose the best of breed  
components for your application.



TurboCMF is very modular.

Everything on a site is an Asset.

Everything has a path.

Everything has an order.

Everything may be a container.

May. Some things aren't.

Some things are singletons.

(Shopping carts.)



(Authentication mechanisms.)

Some sample Asset types include:

# Page

A container for static content, usually shown as a concrete page.

# Folder

A general purpose organizational container.

# Account

A place to store authentication information e.g. a password.

# Navigation

A configurable list of links.

# Alias

A redirector and convenient click counter.

# Cart

A shopping cart management and checkout interface.



# Subscription

A recurring purchase.

# Feed

A provider of RSS and Atom feeds for its containing asset.

Etc.

(There are a lot of them.)

# Application Server

# Application using Assets

# Custom Application

CMF co—exists peacefully.

New & Old



# Getting Started

# Install TurboGears

Follow the online guide: <http://www.turbogears.org/2.0/docs/>

# Install Desired Libraries

MySQL, PIL, ReST, &c.

# Install TurboCMF & Components

Online guides are good: <http://docs.turbocmf.org/>

# Create your site.

paste quickcmf

# Answer a few questions.

Site name, database connection, default user...

Visit your new site.

<http://localhost:8080/>

Questions?



# Gritty Detail

(Things to frighten children with.)

# MVC

Model, View, Controller

# Model

SQLAlchemy + Elixir

# View

Genshi XHTML Templates

# Controller

Standard Python Classes

Instance = Directory

Method = File

# CMF Controllers

Special naming conventions.



`_action_foo(...)`

`http://.../action:foo`

`_view_bar(...)`

`http://.../view:foo`

# Example Controller

```
from cmf.core import View
from cmf.components.asset import controller

class Foo(controller.Asset):
    bar = View("Bar", "My cool view.")

    @expose("genshi:...foo.views.hello")
    def _view_bar(self):
        return dict(message="Hello World")
```