

# Morepath!

Sheesh, *another* web-framework?

*is this #jszurich or what?*

A cartoon illustration of a red crab with a large, bulbous head and a wide mouth. It has two white eyes with black pupils and small antennae. The crab is wearing a yellow jacket over a teal scarf. It is looking towards the right side of the frame with a surprised expression. To its right, there is a large, stylized red shape that resembles a flame or a jagged mountain peak.

why not  
Morepath?

**I am Morepath contributor #2\***

*\*with 38 out of 999 commits*

# So what is Morepath?

A web micro-framework with superpowers!



# Morepath History

- First commits in 2013
- Created by Martijn Faassen
- LXML
- Fanstatic
- Zope

# Morepath Lineage

- Morepath is a child of Zope
- Pyramid is a child of Zope

# **Features that set it apart.**

- Change/extend all the things.

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- Change/extend all the things.
- Models and views separated.
- Paths are first class citizens.
- REST first.

# Boooring!

Let's look at some code!

# Defining an App

```
import morepath

class App(morepath.App):
    pass
```

# Defining a Model

```
class Page(object):
    def __init__(self, id, title):
        self.id = id
        self.title = title
```

# Defining a Path

```
@App.path(path='page/{id}', model=Page)
def get_page(id):
    return Page(id)
```

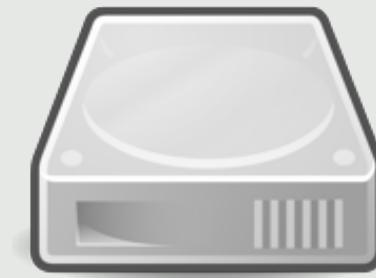
/page/about



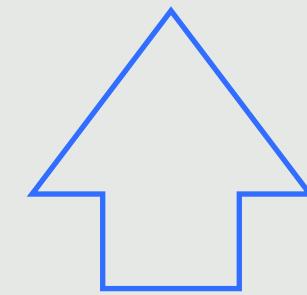
PostgreSQL



mongoDB



/a/file



# Defining a View

```
@App.html(model=Page)
def view_page(self, request):
    return '<p>%s</p>' % self.title
```

or

```
@App.json(model=Page)
def view_page(self, request):
    return {'title': self.title}
```

# This totally fits

```
import morepath

class App(morepath.App):
    pass

class Page(object):
    def __init__(self, id, title):
        self.id = id
        self.title = title

@app.path(path='page/{id}', model=Page)
def get_page(id):
    return Page(id, title=id)

@app.html(model=Page)
def view_page(self, request):
    return '<p>%s</p>' % self.title
```

# Extensibility

No more pull requests!



# No More Pull Requests

```
from someblog import App, Page, get_page

class MyApp(App):
    pass

@app.path(path='page/{id}', model=Page)
def get_my_page(id):
    if id == 'portfolio':
        return Page(id='portfolio', title=...)

    return get_page(id)

/page/portfolio
```

# My HTML > Your HTML

```
from someblog import App, Post, view_post

class MyApp(App):
    pass

@MyApp.html(model=Post, template='custom.pt')
def my_view_post(self, request):
    return view_post(self, request)
```

# But I \*need\* this

```
from someblog import App, Post

class MyApp(App):
    pass

@MyApp.html(model=Post, name='extra')
def my_extra_view(self, request):
    ...
```

/post/morepath-rocks/extra



# Links

The best thing since sliced bread



# How Others Link

```
@app.route('pages/{id}', name='pages_route')  
...  
  
request.link('pages_route', id=page.id)
```

# How It Should Be Done

```
@app.path(path='/pages/{id}', model=Page)  
...  
  
request.link(my_page)
```

# Models, Views

A case for separation

# How Others Do It

```
@app.route('/pages/{id}')
def view_page(request, id):
    page = query_page(request, id)

    if page is None:
        raise HTTPNotFound()

    return {'title': page.title}
```

# How It Should Be Done

```
@App.path('/pages/{id}', model=Page)
def get_page(request, id=0):
    return query_page(request, id)
```

```
@App.json('/pages/{id}')
def view_page(self, request):
    return {'title': self.title}
```

# Model View Separation 😊

- Inherit all the views.

# Model View Separation 😊

- Inherit all the views.
- Write generic views.

# Model View Separation 😊

- Inherit all the views.
- Write generic views.
- Very easy to add a REST API.

# More Features

OMG!



# Amuse-buche

- Override core Morepath.

# Amuse-buche

- Override core Morepath.
- Model driven permissions.

# Amuse-buche

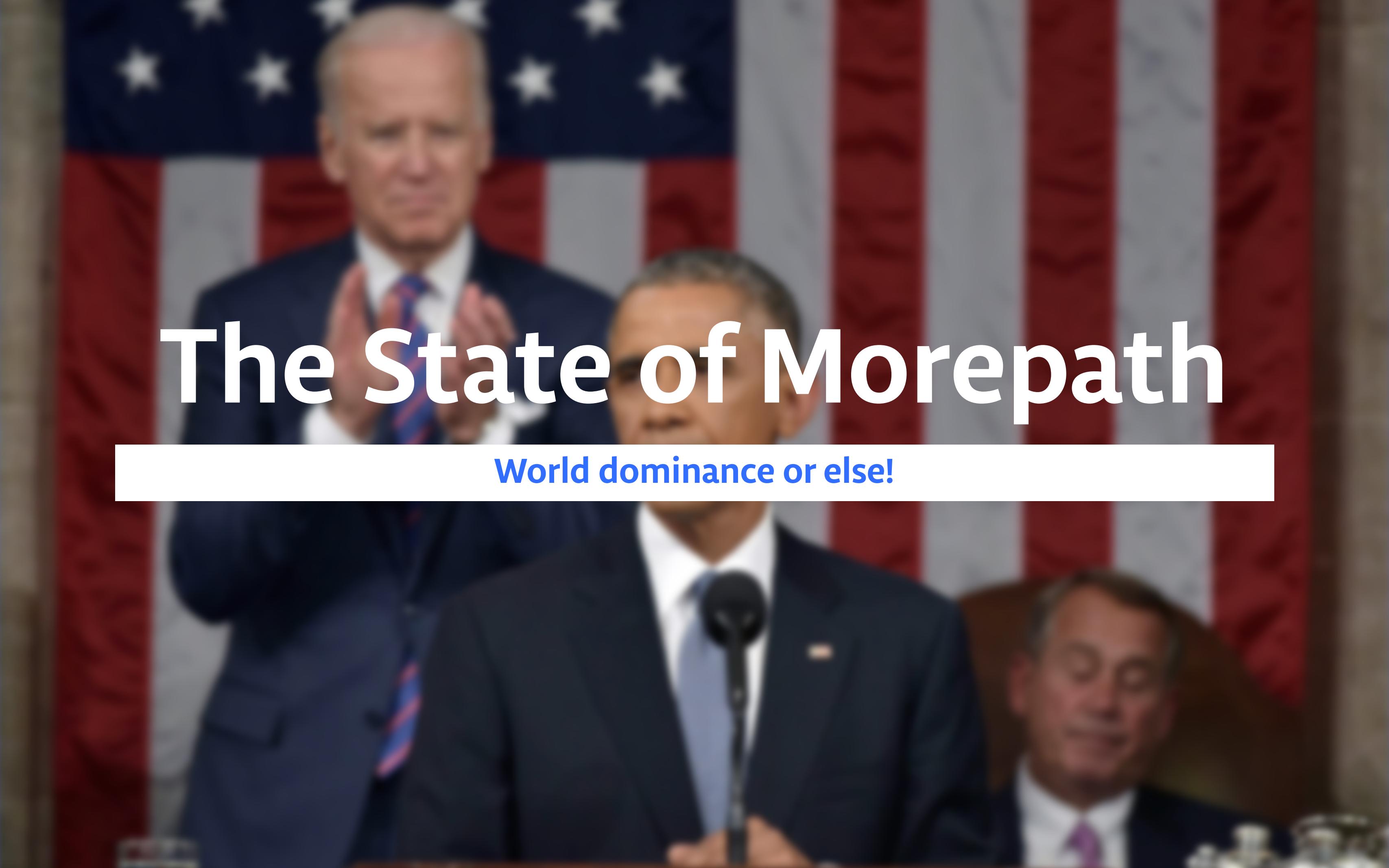
- Override core Morepath.
- Model driven permissions.
- Exception views.

# Amuse-buche

- Override core Morepath.
- Model driven permissions.
- Exception views.
- Link to other applications.

# Amuse-buche

- Override core Morepath.
- Model driven permissions.
- Exception views.
- Link to other applications.
- Mount other applications.



# The State of Morepath

World dominance or else!

# The End

[morepath.readthedocs.org](http://morepath.readthedocs.org)

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 @href\_



[speakerdeck.com/href/morepath-introduction-at-pyzurich](https://speakerdeck.com/href/morepath-introduction-at-pyzurich)