

Development and Deployment with WSGI in Django

Django User Group in London (DJUGL), February 2010.

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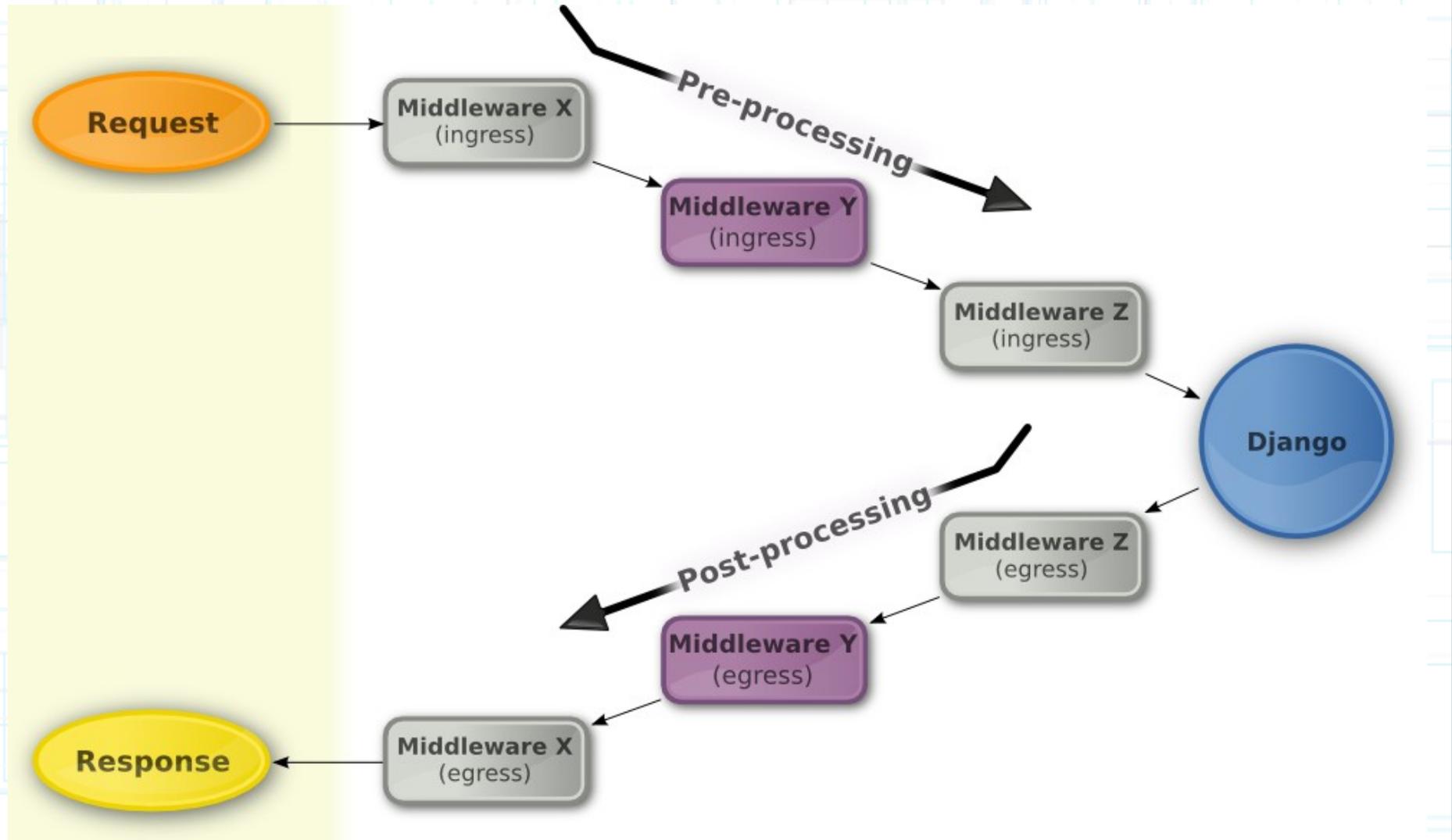
Who's speaking?

- Gustavo.
- Works for Web 2.0 company.
- Repoze and TurboGears core developer.
- Believes in WSGI above all else.

What's WSGI?

- Python “standard”.
- Like CGI, at the Python level.
- Useful for development too.
- Makes possible framework-independent components.
- Established for more than 6 years.

Where is Django?



twod.wsgi

- One goal: Improve Django's WSGI support.
- Won't break existing applications.
- Stable, no known bugs.
- First release very soon.
- Hopefully merged into a future Django release.
- Testers and contributors are welcome!



**Things you can do
now**

Use PasteDeploy config files

- Suitable for configuration, unlike Python code.
- Complement or replace (your choice) settings.py
- Widely used.
- INI format.
- Extremely flexible.
- Wave goodbye to *DJANGO_SETTINGS_MODULE!*

Run initialisation code

- One-off code when the application has started up.
- Before any import from Django or your application.
- Or right after your application has been set up.

Use WSGI middleware

- Not only for deployment.
- Can be configured in INI files or Python code.

Get a better development server

- *manage runserver* is OK, but Paste's rocks.
- It's multi-threaded.
- Can serve your application in different modes.
- Can serve your media.
- Often used in deployment too!

Mount applications

- Serve Trac as a Django view.
- Or the PHP-powered WordPress!
- Filter the input they get.
- Filter the response they return.
- Mount them on-the-fly.
- Single Sign-On for free!

Write functional tests with WebTest

- More reliable replication of production environment.
- More features.
- Can parse HTML, XML and JSON responses.
- Can fill out forms and submit them.
- twod.wsgi has a Nose plugin for *WSGIified* Django applications.

Get more from requests

- Request objects now have way more members.
- They come from WebOb.
- HttpRequest members still available.
- A real proxy to the WSGI environment.
- Short-cuts to standard HTTP request headers.

Expose the URL arguments

- `/posts/hello-world` has one routing argument (e.g., `post_slug="hello-world"`).
- Dispatchers in Web frameworks should make them available in the request.
- Django does thanks to `twod.wsgi`.
- Useful for generic, 3rd party libraries.



Let's get practical

What's next?

- Check if there's anything for you in the Paste project (pythonpaste.org).
- Or Repoze (repoze.org).
- Spread the word about it!

Thank you!

- Slides will be published on <http://dev.2degreesnetwork.com/>
- twod.wsgi Web site:
<http://packages.python.org/twod.wsgi/>
- Development Web site:
<http://bitbucket.org/2degrees/twod.wsgi/>
- Follow @2degrees on identi.ca.