Ansistrano
Ansible for application deployments

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Who the hell

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We're hiring Python and frontend devs!

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Why Ansible?

- Provisioning
- Configuration Management
- Continuous Delivery
- ...

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+ Deployment

Goals

➔ Automate deployment steps
➔ Minimize downtime
➔ Preserve consistent state during deploys
➔ Be able to rollback quickly

BTW, what about...

Database migrations?

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Database migrations?

Let's forget about them for now ;(

Capistrano

"A remote server automation and deployment tool written in Ruby"

(~2006)

Ansistrano

=

ANSIBLE

+

Capistrano

Ansistrano

2 Ansible roles

➜ **carlosbuenosvinos.ansistrano-deploy**
https://github.com/ansistrano/deploy

➜ **carlosbuenosvinos.ansistrano-rollback**
https://github.com/ansistrano/rollback

Does anybody care?

Main ideas

1. Deploy to a new release directory
2. Run all the preparations
    a. Install requirements
    b. Build static assets
    c. ...
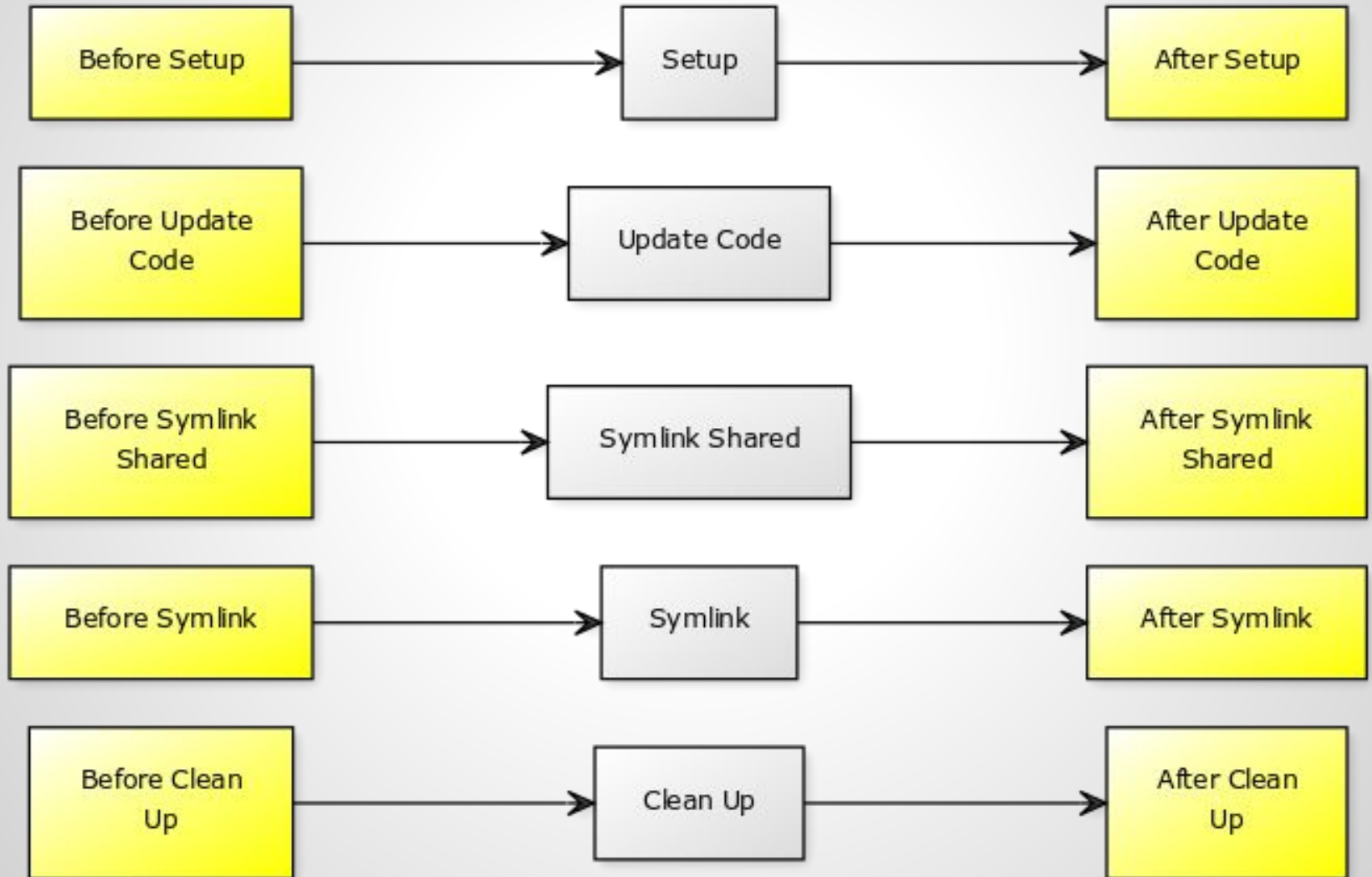3. Switch symlink to the new release

Main ideas: rollback

Rollback: switch the symlink back

Directory structure

```
├── current -> /var/www/my_app_name/releases/20150120114500/
├── releases
│       ├── 20150080072500
│       ├── 20150090083000
│       ├── 20150100093500
│       ├── 20150110104000
│       └── 20150120114500
├── repo
│       └── <VCS related data>
└── shared
        └── <linked_files and linked_dirs>
```

Flexible hook approach

Before Setup	→	Setup	→	After Setup
Before Update Code	→	Update Code	→	After Update Code
Before Symlink Shared	→	Symlink Shared	→	After Symlink Shared
Before Symlink	→	Symlink	→	After Symlink
Before Clean Up	→	Clean Up	→	After Clean Up

Example playbook: deploy

```yaml
1    ---
2    - name: Deploy ansistrano.com Website
3      hosts: all
4      vars:
5        ansistrano_deploy_from: "{{ playbook_dir }}/"
6        ansistrano_deploy_to: "/var/www/ansistrano.com"
7        ansistrano_after_update_code_tasks_file: "after-update-code.yml"
8        ansistrano_after_symlink_tasks_file: "after-symlink.yml"
9        ansistrano_keep_releases: 3
10     roles:
11       - { role: carlosbuenosvinos.ansistrano-deploy }
```

(From https://github.com/ansistrano/ansistrano.com)

Example playbook: rollback

```
1    ---
2    - name: Rollback ansistrano.com Website
3      hosts: all
4      vars:
5        ansistrano_deploy_to: "/var/www/ansistrano.com"
6        ansistrano_after_symlink_tasks_file: "after-symlink.yml"
7      roles:
8        - { role: carlosbuenosvinos.ansistrano-rollback }
```

(From https://github.com/ansistrano/ansistrano.com)

Features

- Deploy hooks
- Release cleanup
- Several code deployment strategies
  - git/svn/hg
  - rsync/scp
  - S3
- Shared files and directories

Things to keep in mind

- Check mode: not really
- Working directory is changed (surprise!)
  uwsgi:
  ```
  --hook-post-fork chdir:{{ project_dir }}
  ```
- Anonymous stats

○ ▼ Ansistrano

ansistrano.deploy and **ansistrano.rollback** are Ansible Galaxy roles to easily manage the deployment process for scripting applications such as PHP, Python and Ruby. It's an Ansible port for Capistrano.
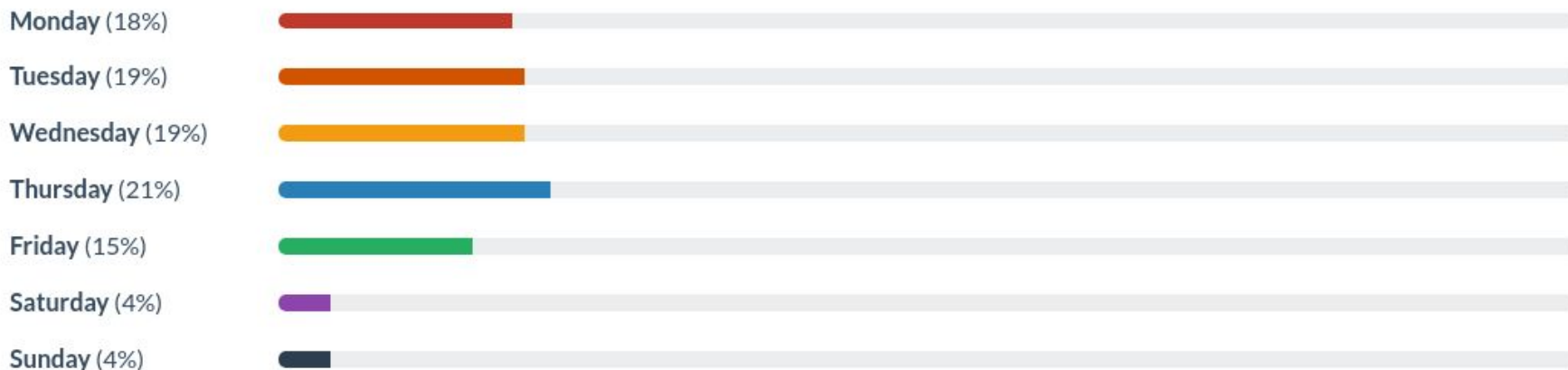
Wow! 315863 deployments so far!

Today, teams using Ansistrano have already deployed **1137** times. When considering the whole month, the amount of deployments is **19449** and this year we've reached the **199253** deployments.

Ouch! 1265 rollbacks so far!

On the other hand, today teams rollbacked **4** times. That's **35** times considering the whole month and **683** if considering the whole year. Rollback vs. Deployment ratio is **0.40%**, nice! Keep the good work.

Deployments by weekday

Monday (18%)

Tuesday (19%)

Wednesday (19%)

Thursday (21%)

Friday (15%)

Saturday (4%)

Sunday (4%)

Developed with ❤ in Barcelona