Buildout

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PyVo 25.10.2012

Co je to buildout?

- zc.buildout (od r. 2006)
- opakovatelný deployment
- nejen python
- izolované prostředí na fs
- rozšiřitelnost

http://www.buildout.org

Syntaxe

```
[buildout]
parts = pokus

[pokus]
recipe = zc.recipe.egg
interpreter = mypython
eggs = odict
```

Jak na to

- wget http://svn.zope.org/repos/main/zc.buildout/trunk/bootstrap/bootstrap.py
- edit buildout.cfg
- python bootstrap.py
- bin/buildout

Recipes

- djangorecipe, fez.djangoskel
- z3c.recipe.ldap
- collective.recipe.patch
- collective.recipe.omelette

http://www.buildout.org/docs/recipelist.html

PyPI - hledat „recipe“

Příklady použití

- https://github.com/plone/buildout.coredev
- https://github.com/collective/buildout.python
- https://github.com/diefenbach/lfs-buildout-development
- http://code.google.com/p/typhoonae/source/browse/buildout.cfg (memcache, nginx, mongodb, rabbitmq, celery, sphinx, ejabberd, ...)

Minimal Plone buildout

```
[buildout]
parts = instance
extends = http://dist.plone.org/release/4.1-latest/versions.cfg
find-links = http://dist.repoze.org/

[instance]
recipe = plone.recipe.zope2instance
eggs =
    Plone
    PIL
    collective.gallery
```

Plone

- wget bootstrap.py
- python2.6 bootstrap.py
- bin/buildout
- <zadat admin username/password>
- bin/instance fg
- http://127.0.0.1:8080

Deployment

- buildout.cfg a jeho závislosti jsou jediné opravdu důležité soubory pro deployment
- na serveru
  - git clone/svn checkout
  - ln -s deployment.cfg buildout.cfg
  - python bootstrap.py
  - bin/buildout

BAF

BAF

```
[buildout]
extensions = mr.developer
parts = pybaf
[sources]
baf = git https://github.com/kvbik/python-baf
[pybaf]
recipe = zc.recipe.egg
interpreter = pybaf
eggs = baf
```

BAF

```
# bin/pybaf
>>> import baf
>>> baf.__version__
(1, 0)
```

```
# bin/baf
an example packaging layout
see https://github.com/kvbik/python-baf for more
version = 1.0
```

BAF

```
bin/develop checkout baf
bin/buildout -N
```

- nyní bin/baf i bin/pybaf používají clone z src/baf

```
bin/develop deactivate baf
bin/buildout -N
```

- bin/baf a bin/pybaf – egg z PyPI

Závěr

- ✗ složitější setup než virtualenv (bootstrap.py)
- ✓ vhodné na větší, složitější projekty
- ✓ izolované prostředí
- ✓ možné použít nejen pro Python packages (Python, SOLR, Apache, Varnish, SQL, Jenkins, supervisor, selenium, ...)

One more thing...

jarn.mkrelease

- Python releaser
- commit/tag git, svn, hg
- upload na PyPI, sftp, plone.org nebo jen vytvoření egg/zip
- release zip, egg
- http://pypi.python.org/pypi/jarn.mkrelease

jarn.mkrelease

```
# cd src/baf
# mkrelease -qCTS (no-commit, no-tag, no-upload)
Releasing baf 1.0
running egg_info
running sdist
done
# ls dist/
baf-1.0.zip
```

Děkuji

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