

Frequently asked questions -
frequently answered -
but now for the last time :-)

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This talk

- ...is about frequently asked questions (FAQs) on IRC and mailinglists
- ...is about telling a bit about best practise
- ...may contain some rant :-)
- ...and hopefully some good advices

Speaker

- Python developer since 1992
- Zope core developer since 2001
- Zope 2 release-manager
- Contributor to Zope & Plone
- Co-funder and 2nd chairman of German Zope User Group (DZUG e.V.)
- Author of various Zope and Plone products
- www.zopyx.com



Q: How do I install the Plone theme **x.y**?

- A: Google for **x.y**
- A: Check the documentation of **x.y** on PyPI
- A: Read the installation how-to for add-ons on plone.org
- A: Buildout:
 - add **x.y** to the **eggs** and **zcml** options (buildout.cfg)
 - re-run buildout,
 - install **x.y** through Plone control panel

Q: How do I change the Plone logo?

- A: Google for „**plone change logo**“
- A: Customize the **logo.pt** through **portal_view_customizations** (ZMI)
- A: Look at the **CSSManager** add-on

Q: Where is what and why? (Browser inspection tools)

- A: Useful tools:
 - **Gloworm** - for inspecting all elements of a Plone site (where is what and where is it defined)
 - **Firebug** - your tool for CSS issues (and other stuff)
 - **Your browser** - most browsers provide developers tools ootb (Opera, Safari) or as add-on (IE, Firefox)

Q: System requirements?

- A: they are documented within the Plone release notes - please read up

Plone 2.5	Zope 2.8/Zope 2.9	Python 2.4
Plone 3.X	Zope 2.10	Python 2.4
Plone 4	Zope 2.12	Python 2.6 (2.5)

- Please stick with the recommended and tested versions!

Q: where can I find xx.py or where is getProperty() defined

- A: for finding files by name:
 - **find <directory> -name xx.py -ls**
 - search within the Plone sources tree or the eggs directory
- A: for finding files by „prominent“ terms/content
 - **grep -r <term> <directory>**
 - search within the Plone sources tree or the eggs directory
 - also useful: DocFinderTab

Q: Import of module **XX** does not work within my PythonScript

- A: PythonScript are **restricted** (for security reasons) and allow only import of some secure modules („*untrusted code*“)
- A: At your own risk:
use `allow_module()`, `moduleSecurityInfo()`
- A: use „*trusted code*“ (**unrestricted** Python)
aka browser views or Python code within your policy package

Q: Is there a chat/XXX product for Plone?

- A: Google for „**plone chat/xxx add-on**“
- A: visit <http://plone.org/products> and type „**chat**“ into the search field

Q: Does package XXX work with Plone 3?

- A: Read the release notes on the project page on plone.org and/or on PyPI
- A: install it and try it out (especially for unknown add-ons)
- If you encounter problems with Plone 2.X add-ons:
 - consult the Plone 3 product migration guide (plone.org)
 - try to fix the code yourself
 - consult the package maintainer

Q: Why is there no workflow for File and Image?

- A: images and files are often referenced from other documents.
- A: managing there states individually often breaks usability
- A: if you need a workflow for File and Image:
 - Plone Setup -> Types -> File/Image -> select workflow

Q: I encounter „permission denied“ errors on the filesystem when starting Plone

- A: Likely you are working as **root** or using **sudo**
- In 99% of the cases:
 - there is no need for being root and using sudo
 - working/installing Plone under a standard user account is recommended and usually „good enough“ [tm]
- Wanna run Plone on port 80 then use a reverse proxy (Apache, Squid, Varnish - look at „**virtual hosting**“)

**Q: How do I make
a
properly work in my page template?**

- A: Use the ZPT **structure** directive
- A: `tal:content="structure context/someMethod"`
- docs.zope.org -> The Zope 2 Book -> ZPT docs
- plone.org -> ZPT tutorial

Q: How to avoid Unicode errors?

- A: Plone 3.X works nicely with Unicode/UTF-8
- A: it is usually 3rd-party code causing problems
- A: **always** access/modify AT-based content through the related accessor/mutator methods (getXXX(), setXXX())
- A: **NEVER EVER** modify instance attributes directly (unless using AT FieldProperty)

Q: How to debug Unicode errors?

- A: You investigate the traceback where the error occurs
- A: Read a traceback from the back...the last lines matter
- A: **pdb.set_trace()** within the code causing the problem
- A: figure out the related string causing the problem - this usually gives you a good indication where the problem (wrong 3rd-party code might come from)
- <http://plone.org/documentation/how-to/using-pdb>

**Q: I have upload files into Plone.
Where are they stored
on the filesystem?**

- A: You can not access uploaded content directly.
- A: All data is stored within the ZODB (Data.fs)
- A: You can access Zope/Plone using FTP or WebDAV

Q: How to debug Unauthorized errors?

- A: You google „plone debug unauthorized“
- A: set **verbose-security on** within buildout.cfg or zope.conf
- A: VerboseSecurity explains you clearly
 - why the Unauthorized exception occurs
 - which permissions/rights are required
 - which roles/rights you have

Q: How can I get hold of objects by path or ID?

- A: Using **Acquisition** in Zope

```
obj = context.some_id  
obj = getattr(context, some_id)
```

- A: Using **Path Traversal** in Zope

```
obj = context.restrictedTraverse(, /path/to/object `)
```

Q: I messed up my site. How can I revert?

- A: You tried that on your staging server before going into production. So you don't care.
- A: You are smart and created a backup of your site before messing it up. So you take the backup and don't care.
- A: You don't know what you are doing, your working without staging server and have no backup and like the concept of Testing-while-Production?:
 - Undo (Undo-Tab ZMI, Undo Site Action)
 - Backup the ZODB and truncate it step-by-step

Q: How scalable is Plone?

- A: OOFB performance: at most 10 requests/second
- For scalability:
 - caching of anonymous requests (Squid, Varnish)
 - horizontal scaling:
 - throw hardware into your setup
 - use ZEO for any production setup

Q: How do I get most of Plone on a multi-core machine?

- A: Python is multi-threaded but can use only **one CPU**
- A: Spread your load (HTTP requests) over multiple ZEO clients behind a load-balancer
- Typical setup for a quad-core machine:
 - one ZEO server
 - one reverse proxy or cache
 - two or more ZEO clients
 - load-balancer

Q: Locked out?

- A: Google „plone locked out“
- A: create a new manager:
bin/zopectl adduser <username> <password>
- A: create an emergency user using
zpasswd.py + access file

Q: I modified my template and the changes won't show up?

- Best practise: run Zope **always** in foreground during development (**bin/zopectl fg**)
- ensure Zope debug-mode is enabled (**debug-mode on**)
- **plone.reload** saves you a lot of restarts and turn-arounds
 - applies to browser views and templates
 - applies not changes in Python code in general

Hunting down problems

- Typical problem patterns:
 - starting Zope in the background and no response through HTTP
 - strange ComponentLookupError within the error_log
- Approach the analysis by:
 - starting Zope in foreground (zopectl fg)
 - checking your console messages and check your log files
 - trying to read and understand error messages
- Error messages won't bite you into the nose



If you ask a question

- First check the mailinglist archives or ask Google
- Be precise as possible and be verbose
(but come to the point)
- Provide reasonable version information
- Include **full** tracebacks (from error_log or console)
- Include **reasonable** and **related** code snippets

Keep this under your pillow

- **Professional Plone Development** by Martin Aspeli
- **The Definitive Guide To Plone** (PDF online)
- **The Zope 2 Book** (docs.zope.org)
- **The Zope Developers Guide** (docs.zope.org)
- <http://plonemanual.twinapex.fi/>
- <http://plone.org/documentation>
- <http://plonebook.info>
- <http://docs.zope.org>

Questions?