Everything Addons

Guidance on evaluating and developing Plone addons

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Addon Madness

Does your site setup look like this?

Add-On Configuration

Akismet	JQueryUI	Open Graph sharing settings
Change Ownership	Keyword Manager	Plone True Gallery settings
Content Statistics (type/state)	Lineage settings	PloneFormGen
Cover Settings	Listing Custom Fields	Ratings
Document Viewer Async Tasks	Listing View	Redirection and Aliases
Document Viewer Settings	LoginLockout	Upgrades
Dropdown menu configuration	Media Settings	Vocabulary Library
EEA Faceted Navigation Tool	Non tracking Social Buttons	Workflow Policies
Easy Slider settings	Norobots widget settings	

Addon Madness cont.

Does your buildout look like this?

```
eggs =
    Plone
    plone.app.kss
    plone.directives.form
    Pillow
    Cython
    lineage.themeselection
#   Products.PloneHotfix20130618
    BeautifulSoup
    plone.app.theming
    plone.app.dexterity[grok,relations]
    Products.EasyAsPiIE
    Products.PlonePAS
    Products.PloneFormGen
    Products.RedirectionTool
    collective.flowplayer
    collective.easyslider
    Products.ContentWellPortlets
    collective.easytemplate
    collective.tabr
    Products.ImageEditor
    collective.recaptcha
    collective.portlet.banners
    Products.PlonePopoll
    collective.blog.star
    collective.blog.feeds
    collective.plonetruegallery
    collective.ptg.allnewest
    collective.ptg.contentleadimage
    collective.contentleadimage
    collective.prettysociable
    Products.contentmigration
    Products.PFGDataGrid
    uwosh.pfg.d2c
    webcouturier.dropdownmenu
    Products.AdvancedQuery
    collective.virtualtreecategories
    Products.PloneKeywordManager[Levenshtein]
    Products.ATVocabularyManager
    plone.app.async
    Products.PressRoom
```

```
    eea.facetednavigation
    eea.faceted.vocabularies
    eea.faceted.blue
    eea.faceted.tool
    eea.tags
#   eea.geotags
#   eea.alchemy
#   eea.relations
    collective.geo.geographer
    collective.geo.openlayers
    collective.geo.settings
    collective.geo.mapwidget
    collective.geo.kml
    collective.geo.contentlocations
#   collective.zipfiletransport
    plone.contentratings
    collective.colorbox
      Shapely
    collective.jqueryuithememanager
    collective.js.jqueryui
      plone.formwidget.captcha
    collective.akismet
    collective.z3cform.norobots
    collective.z3cform.keywordwidget
    plone.formwidget.autocomplete
    collective.z3cform.colorpicker
    plone.resource
    plone.namedfile[blobs]
    collective.namedfile
    plone.formwidget.namedfile
    plone.app.registry
    BeautifulSoup
```

```
    collective.lineage
    collective.contentstats
    collective.documentviewer
    wildcard.foldercontents
    wildcard.notrackingsocial
    Products.LoginLockout
    collective.portlet.fblikebox
#   Products.cron4plone
    collective.portlet.socialnetworks
    collective.fbshare
    zope.app.pagetemplate
    collective.cover
    collective.listingviews
        collective.z3cform.widgets
    plone.app.changeownership
    collective.smartkeywordmanager
    plone.app.workflowmanager
#   collective.categories
#plone 4.3 removed
#   Products.kupu
#   zope.app.cache
#   zope.app.component
#   zope.app.container
#   zope.app.pagetemplate
#   zope.app.publisher
#   zope.copypastemove
#   zope.dublincore
#   zope.hookable
#   collective.searchandreplace
    slc.quickchange
      wildcard.tinymceplugins.youtube
    ftw.zipexport
    plone.app.widgets [archetypes, dexterity]

#plone 4.3 removed end
#------------------
#   Products.WantedDirectory
#   zopyx.convert2
#   zopyx.smartprintng.lite
    jarn.jsi18n
    wildcard.media
    tus
    plone.formwidget.querystring
```

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Addon Madness cont.

Or do you get errors like this?

PicklingError: Can't pickle

Who This Talk Is For

- System administrators
- Integrators
- Developers
- Everyone/Anyone who configures Plone...

Finding Addons

- https://pypi.python.org/pypi - contains more packages than Plone.org

- http://plone.org/products - has ratings

Things to Look For...

- Download stats
- Changelog
- Repository(github) - in the collective?
- Author
- Check with author to see if it's been deployed to many sites

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Inspecting Repository

- Open issues
- Contributors
- Activity
- License
- Tests
- Travis CI

Inspecting the Code

- Does it store custom python objects/use custom content types?
- Does it have an uninstall profile?
- Is the uninstall profile run automatically or does it need to be manually run?

Checking for Uninstall

In project folder structure, look for *collective/<foobar>/profiles/uninstall* folder

Then, to see if it is automatically run on uninstall, look for *collective/<foobar>/Extensions/Install.py* file and check something like:

```python
from Products.CMFCore.utils import getToolByName

def uninstall(self, reinstall=False):
    if not reinstall:
        ps = getToolByName(self, 'portal_setup')
        ps.runAllImportStepsFromProfile('profile-collective.easyslider:uninstall')
```

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Testing Addons

- Run backup before you install, in any problems, remove package and use the undo tab in /manage to rollback the transaction
- Make a copy of your install to staging server, dev, local, something, etc to test on first

Testing Uninstall

1. Add to buildout
2. Run buildout
3. Restart instance
4. Install addon in Plone instance
5. Run addon uninstall(manually in portal_setup if necessary)
6. Remove from buildout
7. Run buildout
8. Restart instance
9. Test that everything is back to normal

Manually Run Uninstall

---

1. Go to /manage
2. portal_setup
3. Find uninstall profile from dropdown
4. Click "Import all steps"

Buildout Tips

Make sure to set in buildout.cfg to force pinning all package versions...

allow-picked-versions = false

Integrators

Buildout Tips cont.

Never use in buildout.cfg

newest = true

with

prefer-final = false

Attempt To Evaluate Costs and Risks

- Any addon is going to come with some risks/cost
- Must be prepared to deal with upgrades, uninstalls, customizations, performance, etc
- Packages that store custom python objects to the ZODB can be more difficult to migrate away from later
- No uninstall profile can cause pain later

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Dodgy Addons

- If an addon looks interesting but seems to have some rough edges, do not necessarily dismiss immediately
- Can you contribute?
- Can you pay a developer to improve it?
- Communicate with addon owner

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Maintenance and Upgrades

- Check changelog before upgrading
- Look for alpha packages, check that there are upgrades available
- If it isn't broken, don't bother upgrading

Addon Failures

Common problems addons will cause and how to fix them
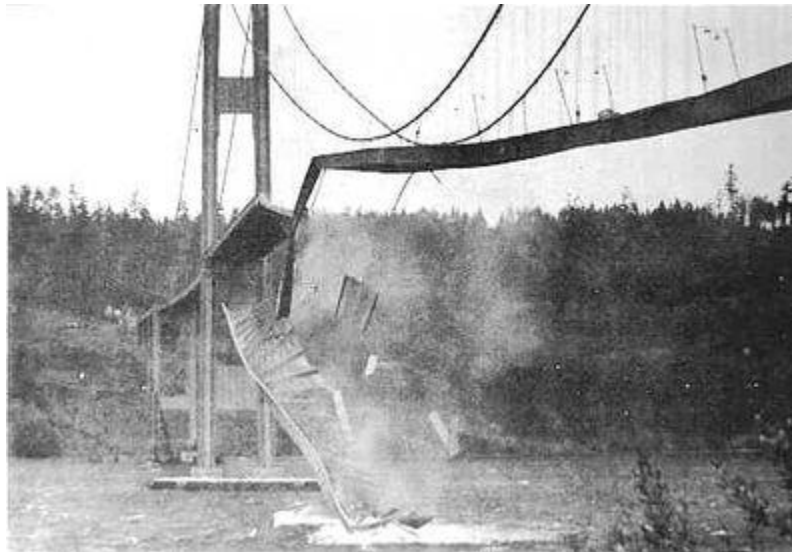
Addon Failures: Leftovers

Addon leaves residual components installs, now broken of course

- js/css registrations: go into /manage portal_ (javascript|css) and manually fix
- Broken portal actions: go into /manage -> portal_actions and manually remove.
- Sometimes they also exist in portal_types -> Actions tab

Addon Failures: Leftovers

Addon installs custom python objects into ZODB

- Attempt to manually delete objects
- Consider leaving package installed on zope instance(not Plone site though)
- Use collective.diversion to alias old class to new class
- Create a custom skeleton package that leaves references to the old package but removes rest of addon

Addon Developers

Tips on managing/developing open source Plone addons

Before You Start

- Is there an existing addon that does the job? Or close to the job? Can you contribute?
- Have others solved your problem in different ways?
- Search all sources for info: pypi, google, github
- Chat with people on IRC about it

Github

- Put in collective github organization. Just ask for access, no one is rejected.
- Provide as much documentation as you can
- Travis CI integration is nice

Support

- Attempt to document what versions of Plone it targets/runs on
- It's sometimes okay if you don't have time to support it, if the addon solves a useful problem, likely someone in the community is always willing to pick up the slack

Don't Be Afraid

- Even if you're not proud of your work or there aren't any tests, still consider sharing on github
- Someone might find the work useful and contribute
- If the addon is of very low quality, refrain from releasing on pypi however

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Releasing

- Try to release to both pypi and Plone.org
- Give the "collective" pypi account access to your package so others can potentially make releases from you if you're unable

Do No Evil

- Do not store custom python objects into the ZODB. Only use primitive python objects-- safe uninstall
- Provide uninstall profile and automatically run when addon is uninstalled--look at collective.easyslider on github for simple example of this
- Make sure the addon plays nice with other sites on the instance that do not have it activated--make sure to use browser layers

Do No Evil cont.

- Do not use local persistent utilities
- Try not to monkey patch…
- Attempt to implement features in unobstructive way
- Make sure to CSRF protect necessary code--check out Plone.protect(in Plone 5 CSRF protection is automatic)

Questions?

Thanks,

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