

Internet-based Discussions using
Zope, CMF, and Swishdot

<http://zope.nipltd.com/>



Useful Information

- Chris Withers
 - `chrisw@nipltd.com`
- New Information Paradigms
 - <http://www.niptd.com>
 - <http://zope.nipltd.com>



New Information Paradigms

- **Paradigm** - *"A constellation of concepts, values, perceptions and practices shared by a community which forms a particular vision of reality that is the basis of the way a community organises itself."*
- Zope Consulting & Hosting
- Lotus Notes, SQL, etc integration
- Wide range of skills including:
 - Perl, VB, etc
 - Linux, Solaris, Windows
 - Zope, python (obviously!)



Some Quick Questions

- How many of you have:
 - never used Zope before?
 - built applications using DTML?
 - used Python Scripts?
 - used ZPT?
 - Written Python Products?
 - built sites using Squishdot?
 - Used the CMF?



Squishdot

- Popular?
- If so, why?

- Useful Information:
 - <http://www.squishdot.org>
 - <http://groups.yahoo.com/group/squishdot>



Easy to Get Started

- Install Zope (using nifty Windows installer)
- Unzip Squishdot
- Start Zope
- “Add Squishdot Site”

- Lets give it a go...



Questions?

<http://zope.nipltd.com/>



What are the problems?

<http://zope.nipltd.com/>



Hard to Upgrade

- Creating a Squishdot Site:
 - Create Squishdot Site Object
 - Copy *all* methods from file system to ZODB
- Upgrading
 - New versions of methods on file system
 - Old versions of methods in ZODB
 - Have they been changed?
 - How do you merge changes?



Hard to Re-Purpose

- Squishdot designed only to manage Postings
- What if I want to add a new field?
- What if I want to add a new type of content?



Missing Functionality

- Membership
- Email communication



The Solution?

- How do we address the problems of:
 - Customisation
 - Re-Purposing
 - Upgrading

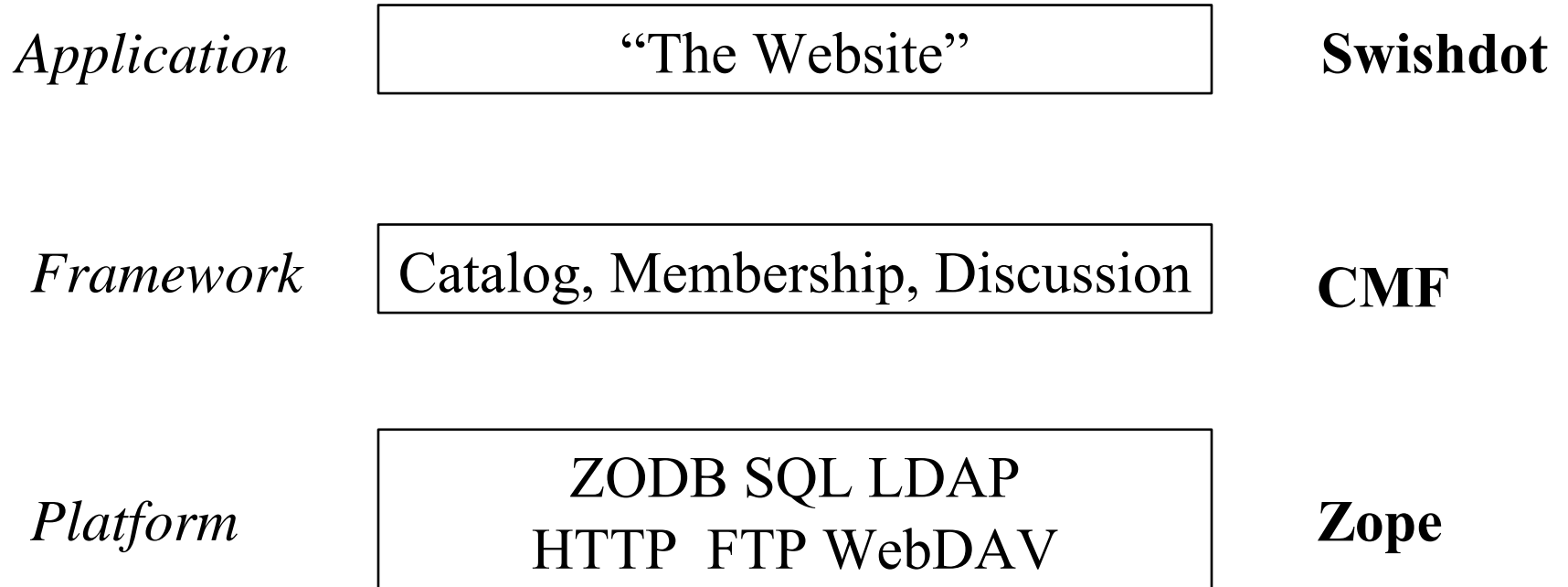


The Content Management Framework

- Useful Information:
 - `http://cmf.zope.org`
 - `http://www.zope.org/Products/PTK/Tracker`
 - `zope-cmf@zope.org`



CMF Architecture



The CMF Site

- Provides a Container for CMF content
- Contains Tools
- Contains Content
- *Does* nothing.

- Lets set one up...



Tools

- Each Tool provides one Service
- The Service is defined by an Interface
- There can be different implementations
- Tools will often use other tools to provide services



Tools that solve Squishdot Problems

<http://zope.nipltd.com/>



Portal Skins

Solving the Customization problem

- Separate Business Logic from Presentation
 - “deep” logic in Python Content Types
 - Customisable logic in Skin-based scripts
 - Presentation in Skin-based methods and templates
- Only have to customise what you need to



How do Skins work?

- Layers contain objects (scripts, templates, etc)
- Skins are made up of Layers
- Names are looked up in each layer in turn

- There can be several skins
- Users can choose which skin they use



Portal Skins : Directory Views

Solving the Upgradability Problem

- Contain file system based skin layers
 - easily distributable
 - easily manageable
 - easily upgradable
- Used for default skin layers
 - Different CMF Products supply different layers
- *Can* be used for custom skin layers
 - If you really like editing on the file system
 - use an external method to “install”



Portal Types

Solving the Re-Purposing Problem

- Factory-based Type Information Objects
 - Specify Methods & Views for a content type
 - Allow you to “re-use” Python Content Types
 - under different names
 - in different workflows
- Scriptable Type Information Objects
 - Allow you to write a “Constructor” script
 - Lets you add new fields
 - eg: store new fields in Properties



Membership

Adds missing functionality “for free”

- Portal Membership
 - provides a “member centric” interface to authentication
 - default implementation:
 - “wraps” acl_users
 - provides cookie-based authentication
- Member Data Tool
 - stores “extra” information about members
- Portal Registration
 - policies for joining / adding a new member
 - allowable member IDs and passwords



Other Tools

The ones that don't solve specific Squishdot problems...



Portal Undo

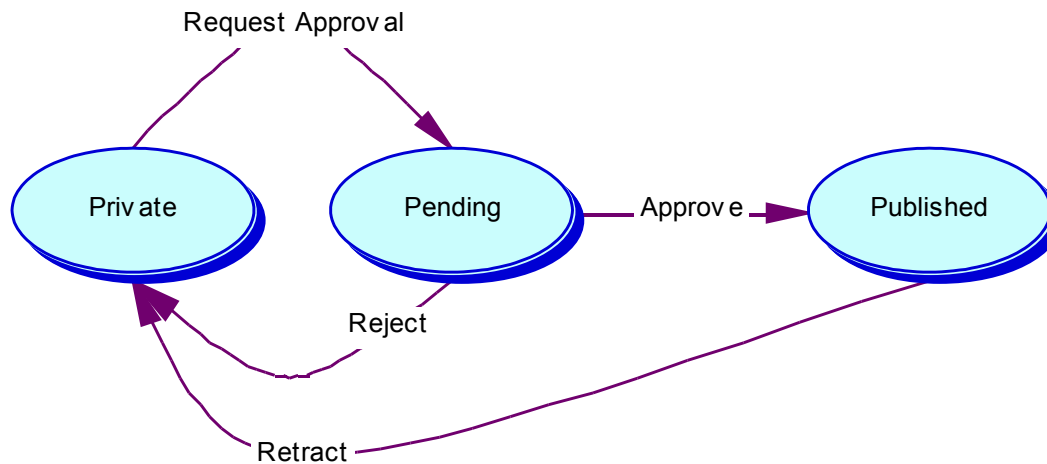
- Exposes Zope's undo to Portal Users
- Filtered to what they can undo
- No access to Management Interface required.

- Not too friendly right now
- but a good start



Portal Workflow

- Solves the “N-Dimensional Security Problem”
- State Based



- DC Workflow implementation allows custom workflows to be built through the web.
- ZFC interface would be amazing...

Portal Catalog

- Normal ZCatalog
- Security Filtered
- Maintains Workflow state
- ...already configured for most peoples needs!



And the rest...

- Portal Properties
 - manages access to portal-wide properties
- Portal URL
 - find the root object of the portal
 - find the base url of the portal
 - surprisingly useful
- Metadata
 - I don't know
 - but it works?



The Tools

...that causes specific Swishdot problems ;-)



Portal Discussion

- Maintains discussion structure
- Manages reply content
- Needs work:
 - No “Delete Reply” interface
 - Hard-coded location of replies
 - Not efficient when rendering big trees
- Can be replaced without affecting other tools!



Portal Actions

- What can I do with this object?
- Actions can come from several sources:
 - Types Tool
 - Workflow Tool
 - Membership Tool
 - Discussion Tool
- Global Actions come from the Actions Tool itself
- This Tool assembles all the actions relevant to the current object and context
- Global Actions should be configurable through the web!



Questions?

<http://zope.nipltd.com/>



What's Missing?

<http://zope.nipltd.com/>



The Application!

- What about CMF Default?
 - Feels like a demo
 - Doesn't attack a niche



Swishdot

- What's the niche?
 - Internet-based Discussions
- What will make it succeed?
 - Easy to get going
 - Flexible once you get more knowledge
- Useful Information:
 - `http://www.swishdot.org`
(hopefully that's all you'll need)



A Demo...

(alpha software warning)

- Add a Swishdot Site
- Post an Article
- Post a Reply
- How is it done?
 - 1 Skin
 - 2 Python Content Types
 - Posting
 - Simple Table
 - 2 Type Information Objects



The Future

- Immediate Aims
- Short Term Goals
- Long Term Goals



Immediate Aims

- Stabilisation
- replace Squishdot
- Provide a niche application of the CMF that works “out of the box”



Short Term Goals

- Topics
 - Canned Catalog Searches
 - Replace Squishdot ‘Subjects’
 - Much more Flexible
- Discussion Tool
 - Make location of content storage independent of position in discussion
 - More efficient display of posting trees



Long Term Goals

- Email Interaction
- Moderation



Email Interaction

- Email In:
 - replies
 - new articles
- Email Out:
 - intelligent notification
 - workflow-linked notification
- Portal Mail Tool?



Moderation

- Who is interested in what?
- Based on Customisable Workflow
- Several Methods:
 - **Explicit**
 - **Keywords**
 - **Voting**
 - **??**



HELP!!

- Squishdot
 - Lots of non-technical users
 - Not much development support

- How can you help?
 - Report bugs
 - Make Suggestions
 - Patches would be nice!

 - <http://sf.net/projects/squishdot>



Wouldn't it be great if...

...Zope as a whole behaved like the CMF



Questions?

- Would anyone like me to make this presentation available?



Thankyou! :-)

