Introducing the Relational Alchemist

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Talk Overview

- Audience - Integrators and Application Developers

- databases in zope and plone (5m)

- introduction into object relational mapping (5m)

- comparison to other techniques (5m)

- tutorial (25m)

- q/a - sprint info (5m)

Why would i want to use plone for relational

- The vast majority of Plone and Zope sites never use relational databases.

- The vast majority of other web application servers, frameworks, do.

- Why the dichotomy.. what prevents greater relational integration?

- Lack of tools - built in, distribution issues

To ORM or not To ORM

- What is an ORM - Object Relational Mapper

- person.name = "abc" vs. update persons set name = "abc" where person_id = 'abc'

- obviates the need for developers to write boilerplate for CRUD

- nutshell ORM save us time, reduce code size, and give our business logic agility in the face of change models and requirements.

Why Relational Databases

- Because you use plone for content management and because you have content locked up in relational systems.

- Building Relational Applications

- Business Intelligence into your CMS

- Changing Deployment Characteristics - Scale the Database

- Known Technology, trusted universally

Integrating Databases and Plone [SF]

- A CMS brings a world of opportunities to apply rich behavior to data

- Context free search, Workflow, Discussion on business objects in databases

- we use annotations to render unto caesar.

Relational Applications

- Watch the buzz, follow the buzz, make your own buzz.

- Rails and Django style development

- deployable inside with either plone or zope2

Business Intelligence

- Hook up report generation tools to your relational data base model

- build custom reporting interfaces using sql queries against the content model.

- incremental content deployment to a relational database, for O

Existing Technologies for Python/Zope/Plone

- Hornet SQL Bridge

- APE

- Rakun

- SQLObject & sqlos

- SQLAlchemy

Who is the Alchemist - Overview

- Its integration technology for zope and plone users to use the facilities of the best of breed relational technology for python within their zope and plone applications utilizing zope3 technologies to facilitate resuse and ease of development.

- a python package for zope integration, a product for ui integration in zope2

Who is the Alchemist - Details

- automatic transaction / session management

- dynamic generation of zope3 schemas

- formlib based views

Archetypes

- The primary platform for alchemist are zope3 technoligies

- Previous incarnations utilized featured Archetypes storages, and portal dumping.

Tutorial (part 1)

- Constructing a application to manage people and addresses

- construct database model

- generate interfaces (our glue to zope 3)

- construct domain model

Tutorial (part 2)

- construct mapping model

- generic containers, stamping with application model

Resources

- HomePage - http://plone.org/products/alchemist

- Mailing List - http://lists.objectrealms.net/mailman/listinfo/alchemist-dev

- Source - https://svn.objectrealms.net/svn/public/ore.alchemist/trunk

Conference Sprint

- This weekend

- http://www.openplans.org/projects/seattle-sprint-2006/alchemist/