

# Multilingual content- management with LinguaPlone



# Plone Solutions

Helge Tesdal  
Geir Bækholt

# Our apologies to those expecting a lot of code-examples

LinguaPlone actually ended up making  
things so simple you won't need it

# Always prepared !

An early start on the interactive tutorial

<http://plonesolutions.com/lp>

A download for those who want to follow along.

# LinguaPlone ?

- A new product for Plone
- For handling multilingual *content*
- For handling translations
- 3rd Gen.

<http://plonesolutions.com/lp>

# Plone User Interface

- Handled by PlacelessTranslationService
- Separate from content
- Many translation teams making Plone-translations and keeping them up-to-date
- 35 languages!
- *You* can help

# Why LinguaPlone

- There have been several attempts before, with different approaches
- Localizer (1st. Gen.)
- I18NLayer, I18NFolder, I18NArchetypes (2nd. Gen.)

# The 2nd Gen. solutions

- These products have helped a lot of people
- They have helped us explore the problem domain
- Some limitations, some different approaches



# 118NArchetypes

- One object represents all translations
- Translations are stored inside complex attributes
- Asking for an attribute returns it in the correct language
- Enables per-field-fallback

# 118NArchetypes disadvantages

- FTP / WebDAV / import / export will need special translation-aware marshallers
- Workflowing translations is challenging for the same reason, as the translations are all the same object
- Special catalog requirements

# II 8NLayer

- Containing wrapper-object that keeps translations inside
- Can keep some data in the layer, like metadata
- Enables translations of all types, not only Archetypes

# II 8NLayer disadvantages

- Limited support for folderish content
- Changes acquisition-path
- Possible reference inconsistencies – are references to point to the layer or the contained object?

# II8NLayer + II8NFolder

- A folder-like object on the II8NAT-principle for folders, II8NLayers for content
- No solution for general folderish content
- Catalog problems for folders



# Enter LinguaPlone

# LinguaPlone features

- As transparent as possible, for site-editors as well as for users.
- Less workarounds
- Everything else works as usual
- Works with your archetypes content-types

- Almost no special skin overrides
- Translations are separate objects
- Can be workflowed separately
- Language-independent fields
- Has a notion of canonical content
- Works with WebDAV and FTP
- Multilingual URLs



# What does it *not* do?

- Translate content automatically
- Handle import/export from external tools
- Handle non-Archetypes content

# Simplicity

- We built LinguaPlone to be simple and easy to extend
- Developers can build features on top of LinguaPlone

- Multilingual-ize your types without affecting the way they work without LinguaPlone installed
- Supporting LinguaPlone is a 4 line-addition to your Archetypes class-definition



# How does it work ?

# Archetypes ClassGen

- Overrides registerType and process\_types from Archetypes
- Builds special mutators and accessors for fields marked as languageIndependent
- Creates a slightly customized constructor for multilingual content

# Archetypes references

- Reference: pointer between objects, independent of location
- LinguaPlone keeps track of translations with Archetypes references.
- “translationOf”-relation

# Multilingual types

- Inherit a special set of Base-classes
- Same as your regular Archetypes base-classes, but also inheriting `II8NBaseObject`.
- Implements `ITranslatable` interface

# Building a multilingual website



# Rules:

- Don't mix languages !
- Flags *do* work for selecting languages
- You still don't *have* to use flags



# Assumptions

- We will be building a *completely* multilingual website
- We will be using only Archetypes content
- All folder-ish content (Folders) with translated sub-content *must* be translated

# Let's set it up first

- Configure and use LinguaPlone
- Add multilingual-support to custom types

# Making it simple !

The package revisited

<http://plonesolutions.com/lp>

# Install-and-go

- Drop the package contents in your products directory
- Restart Zope
- Add a new Plone site, choose Multilingual Site from the drop-down
- The customisation-policy should just do all the product installs, no magic.

# What's in the package?

- Archetypes 1.3 RC2
- ATContentTypes
- LinguaPlone
- PTS + PloneTranslations + LanguageTool
- PlonePortlets w/the new navtreeportlet
- Multilingual Customization Policy + workflow

# AT Content Types !

- Replacement content-types for Plone
- Scheduled for Plone 2.1
- Will make many peoples lives easier
- Already have support for LinguaPlone
- All your default content can be multilingual out of the box

# PlonePortlets

## Shameless marketing break

- Makes portlets into intelligent objects
- Makes portlets archetypes classes
- Enables portlets-per-user and portlets-per-group
- Enables site-editors to add new portlets from a common base
- Not 100% done yet



# For multilingual UI

- PlacelessTranslationService
- PloneTranslations (the .po-files)
- PloneLanguageTool negotiator will keep UI and content language in sync !

## Add Plone Site

Enter an ID and click the button below to create a new Plone site.

**Id**

**Title**

**Membership source**

**Description**

**Customisation policy setup**

Default Plone

Multilingual Site

Policy is a pre-defined type of site, normally set up as as a c  
or settings and add-on products. You can normally not revert this to a Default I  
a lot of work, so make sure the policy you select is the correct one.)

Add Plone Site



# Multilingual Site Policy

- Adds a new Plone site with some additions
- ATContentTypes install and migration
- PloneLanguageTool
- LinguaPlone with demotypes
- Sets up a few default languages

# Language preferences

- Plone setup > Language Settings
- Choose the languages your site will be available in
- Pick at least two

## plone setup

**Plone Configuration** Add/Remove  
Products Error Log Language Settings Mail Settings Portal Settings Skins Users and Groups  
Administration Zope Management  
Interface**Add-on Product  
Configuration**  
No Preference Panels  
available.

## Default language

If content requested is not available in the language the user preferred, content will be presented in the fallback language.

## Allowed languages

Select the languages that can be added in your portal. *use the CTRL key to select / deselect single items.*

Cymraeg (cy)

Dansk (da)

Deutsch (de)

Eesti (et)

English (en)

Español (es)

Esperanto (eo)

Euskara (eu)

Fiji (fj)

Français (fr)

Frysk (fy)

☐ Allow combined language codes like de\_DE or en\_UK.☒ Display flags for language selection.




contents	view	edit	properties	sharing
			add new item ▼	state: visible ▼








## Welcome to Plone

This welcome page is used to introduce you to the Plone Content Management System.

You can customize this frontpage by clicking the edit tab on this document if you have the correct permissions. Create folders and put content in those folders. Folders will show up in the navigation box if they are published. It's a very simple and powerful system.

For more information:

-  [Plone website](#)
-  [Zope community](#)
-  [CMF website](#)

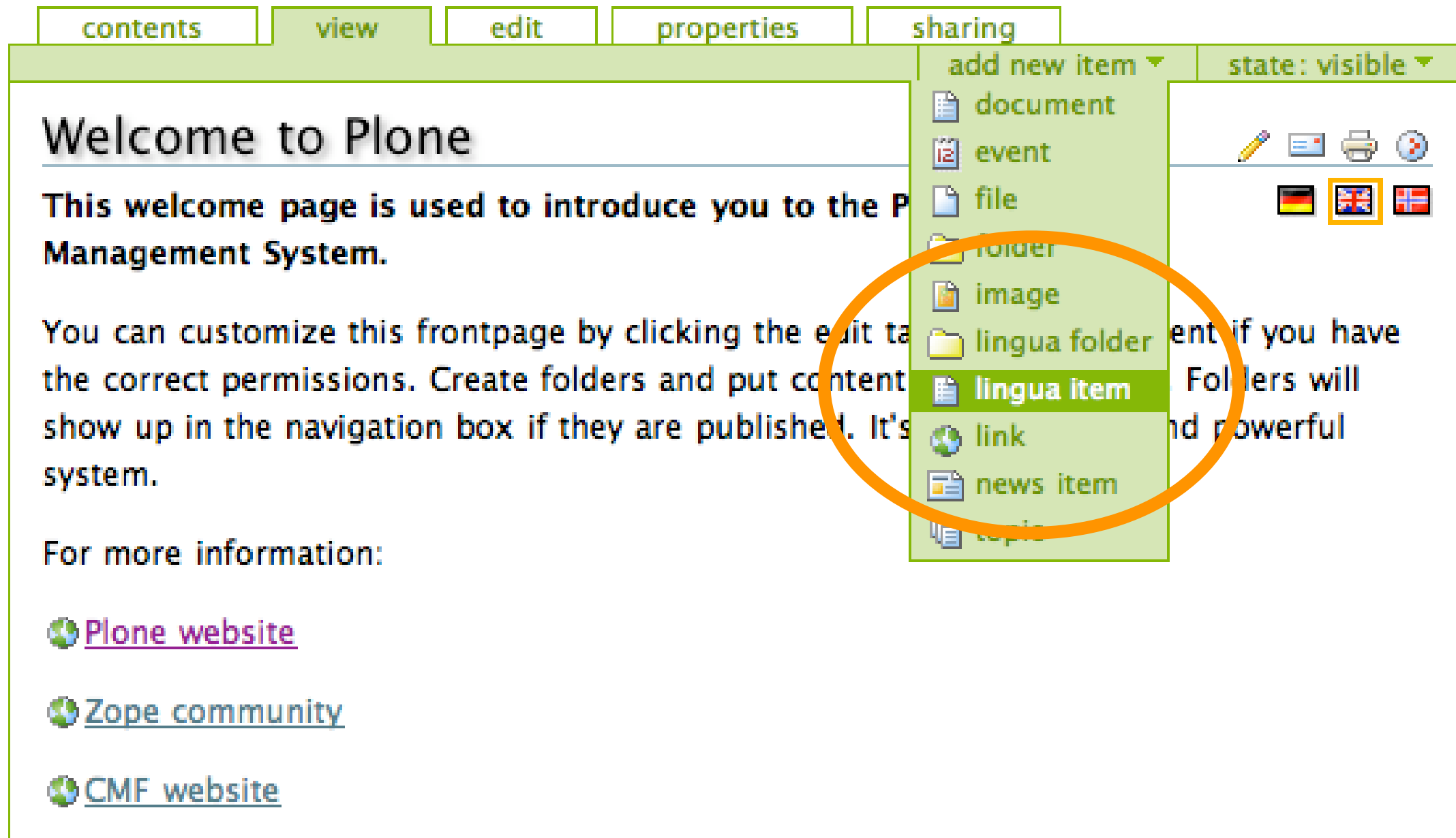
# Multilingual content

# LinguaFolder & Lingualtem

- *Not special*
- Simple example types for testing



# Add a Lingua-Item



The screenshot shows the Plone user interface. At the top, there are tabs for 'contents', 'view', 'edit', 'properties', and 'sharing'. Below these is a header bar with 'add new item' and 'state: visible'. The 'add new item' dropdown menu is open, showing a list of options: document, event, file, folder, image, lingua folder, **lingua item** (highlighted with an orange circle), link, news item, and topic. The main content area displays 'Welcome to Plone' and instructions on how to customize the frontpage. On the right, there are icons for editing, printing, and language selection (German, English, and Danish).

contents view edit properties sharing

add new item state: visible

## Welcome to Plone

This welcome page is used to introduce you to the Plone Management System.

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For more information:

- [Plone website](#)
- [Zope community](#)
- [CMF website](#)

Language-independent

contents

view


edit

properties


translate into ▼

add new item ▼

state: visible ▼

 **Lingua Item has been created.**

## Edit Lingua Item

 **Lingua Item Details**

**Short Name**  
Should not contain spaces, underscores or mixed case. Short Name is part of the item's web address.

**Title ■**

**Contact**  
Enter a contact email address (this field is language independent).

**Body**  
Enter or upload text for the body of the document.  

LinguaPlone is a very useful tool for managing translations and the relations between them in Plone. It is really simple to use.

**Text Format**

# Language-independent

- Attributes that do not change between translations
- Useful for attributes like names, addresses, dates and files
- Stored on each translation
- Changing one updates all translations
- Accessor method actually looks up the value in the canonical object

# Canonical

- The original content
- All translations point to the canonical content as their source
- Useful in business-rules and workflow logic

contents

view

edit

properties

translate into ▼

add new item ▼

state: private ▼

# TestItem

**Title:**  
TestItem

**Contact:**  
info@plonesolutions.com

**Body:**  
A test

View (Plain Text OKb)  Edit

Created by [elvix](#)  
Last modified 2004-09-19 02:18 PM

 deutsch

 norsk

remove translation

language settings

## Endre Lingua Item

Translating from **English**

Lingua Item

### Identifikator

Identifikatoren er en del av innholdets nettstedets-adresse. Bør ikke inneholde mellomrom, store bokstaver, understreking eller andre spesielle tegn.

### Identifikator:

test1



### Tittel ■

### Tittel:

Testing LinguaPlone



### Contact

Enter a contact email address (this field is language independent).

### Contact:

info@plonesolutions.com



### Body ■

Enter or upload text for the body of the document.

### Body:

This is a simple demotype for  
linguaPlone, demonstrating traslatios  
and languageIndependent fields.



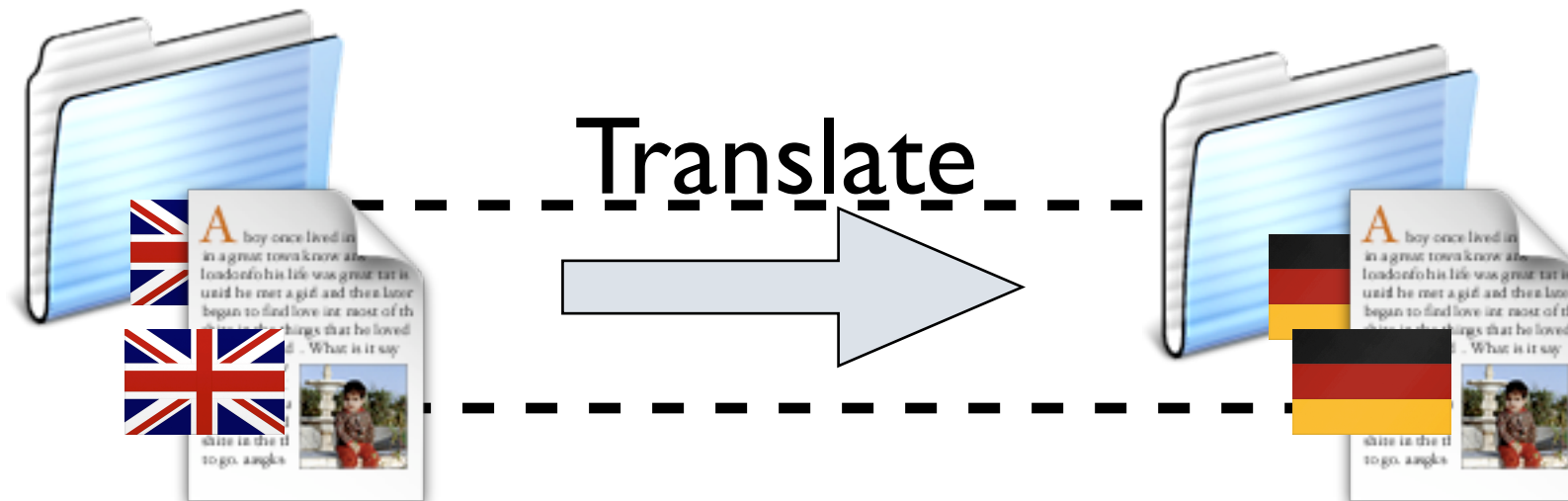
Format

# Separate objects

- Each translation is a separate object
- When translating folders you get a “subtree” for each language
- Clicking a flag switches you to the desired location



# Translate





# Search

- We patched the Catalog Tool
- Searches always return results in the current language
- Makes everything that is based on Catalog queries (like portlets) work without further modification

# Overriding search

- Sometimes, we do not *want* searches to be language aware
- Pass Language="all" to get results in all languages
- Pass Language=['en','de']

# Special indexes

When searching on the following indexes, all results are returned, regardless of language

- Language
- UID
- id
- getld

# Making your own type multilingual

The code example..

Before:

```
from Products.Archetypes.public import *
```

Now:

```
try:  
    from Products.LinguaPlone.public import *  
except ImportError:  
    # No multilingual support  
    from Products.Archetypes.public import *
```

# Translation Workflow

- An example workflow
- Gives you a worklist of objects that are not translated
- Does not enforce translation

- When you create a new translation, it is in the “translating” state
- The canonical object gets a variable set that it is not fully translated yet
- Every time a translation is transitioned from “translated” to “published”, the canonical gets checked whether it is fully translated or not

success



PlonePortlets was  
sucessfully installed.

untranslated items



Testing LinguaPlone  
2004-09-21



[small text](#) [normal text](#) [large text](#)

جستجو


[اعضا](#)
[اخبار](#)
[خانه](#)
[خروج](#) [تنظيمات پلون](#) [واگرد](#) [ترجيحات من](#) [پوشه من](#) [limi](#)

اینجا هستید: خانه « أهلا وسهلا بكم في موقع شركة الناطق للتكنولوجي

[اخبار](#)

jhkhjkhj

2004-09-05

[بیشتر...](#)

سپتامبر 2004						
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26	27	28	29	30		

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[افزودن آیتم جدید](#) [وضعیت: آشکار](#)

تغییرات مدرک مورد نظر ذخیره شد.



## أهلا وسهلا بكم في موقع شركة الناطق للتكنولوجي

أهلا وسهلا بكم في موقع شركة الناطق للتكنولوجيا عبر صفحات صاغتها يد الخبرة بمصادقية وثقة، بين ورسمت فيها فضاءات الأمل ملامح الكلمة والرؤيا بغد أكثر تألقا وأشرقا يحمل للكفيف العربي طياته تباشير التميز والإبداع

إننا في شركة الناطق نسعى جاهدين لنفتح للكفيف نافذة رحبة تواكب بإقتدار التطورات التي تستجد على عوالم التكنولوجيا وأفاقها الممتدة أينما كانت، حيث أصبح بإمكانه ومن خلال خدمات الناطق الحصول على أفضل الأجهزة والبرامج وأحدثها في مجال التقنيات المساعدة للكفيف وضعاف البصر، بالإضافة إلى توفير الدعم الاستشاري والتدريبي الوافي والتميز والذي تقدمه طواقم متخصصة في هذا الحقل.

وعلى أمل أن يتحول هذا الموقع إلى منتدا للتواصل الدائم والمستمر بيننا وبينكم من أجل كل ما هو إلى أفضل أثرا وأعلى قيمة ومن شأنه أن يعود على الكفيف العربي بالنفع والفائدة نتوق شاكرين تلقي مشاركاتكم وإقتراحاتكم عبر الهاتف، البريد الإلكتروني وكذلك من خلال نموذج الملاحظات الموجود على الموقع الإلكتروني الذي أعد خصيصا لهذا الغرض، فالتفكير المشترك والرأي المتبادل يمثل في إعتقادنا مرتكزا هاما وأساسيا من مرتكزات عملية التطور المثمر والتحسين الدائم.

نرحب بكم مجددا في زيارات متواصلة ونرجو لكم جولات ممتعة ومثيرة عبر مواضيع وصفحات هذا الموقع

مع تمنياتنا المخلصة للجميع بالتوفيق

 ايجاد شده توسط [limi](#)  
 آخرین تغییر 06-09-2004 AM 02:55

[جهت‌یابی](#)

[Members](#)
[Ploneboard](#)
[Documentation](#)
[آیتمهای اخیر](#)

jhkhjkhj

2004-09-05

 Home page for limi  
 2004-09-05

[بیشتر...](#)

# Future directions

- Fallback handling
- Reference handling
- Grey out flags where no translations exist

# Questions ?

[info@plonesolutions.com](mailto:info@plonesolutions.com)