Portal Development in India

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National Resource Centre for Free/Open Source Software (NRCFOSS)

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Objectives

- Setting up of facilities to **promote collaborative research, design and development, training of manpower**.
- Encourage and promote **development of applications** under FOSS & **Service Oriented Architectural framework in SME's, and Government environment**
- To develop **generic robust middleware** based on OSS that will be relevant **for e-governance** domain
- To **cooperate and collaborate with national and international** institutions, research laboratories and other academic/research institutes
- To bring together- **Evangelist Technology Players** ISV(Internet Service Vendors), SIs (**Systems Integrators**) & **Industrial Players to contribute** towards the FOSS movement
- To organize **study programmes, lectures, symposia, conferences exhibitions and similar promotional activities** related to FOSS development
- To establish and maintain a **research and reference library** in pursuance of the objectives of the centre
- To establish & maintain **National FOSS Resource Portal**

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Deliverables

- Integrated Service Oriented Architectural framework and security services for e-Governance
- Linux based Indian Language Computer for Schools (in 4 languages) and FOSS related services
- Linux / RT Linux enhancements, Middleware for embedded systems
- Device driver development
- Testing & development services for all India efforts in FOSS for such products including their feature enhancements for uploading to National FOSS database.
- Development of National FOSS Resource Portal
- Provide information and advise on FOSS issues and deployments in e-Governance, Health / Agriculture sector
- Demonstrate the use of FOSS within SME environments
- Indian version of Linux for e-Governance domain

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NRCFOSS Portal Requirements & development

- NRCFOSS serves as the reference point for FOSS in India
- Collaboration & Networking , Community building essential
- Content publishing ,archiving and discussion forums required
- Creation & maintenance of the National portal is essential
- A Content management System is essential

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Content Management Systems

- The most important job of a CMS is managing content
- Nontechnical users to publish information
- Make easy for visitors to find information
- Make it easy for content creators who has less knowledge in web technology
- Good editors removes any semblance of HTML from user's sight

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Introduction To PLONE

- Use Cases
- What is Content Types , introduction to elemental content types
- Plone 3 features
- Multiple users & security
- Workflow
- Search Engine and multi language
- Support : plone.net , books , mailing lists , irc , docs at plone.org

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Why Plone CMS

- The most brilliant CMS innovation in years.
- Internationalization
- W3C standards compliance
- Wide availability of plugins
- User-friendliness,
- Matureness, & development activity
- Choice for Python as the implementation language.

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Why Plone CMS ..

- ZOPE Application Server offers a lot more power
- Wide availability of ready-to-use and free plugins for any purpose
- These plugins are non-intrusive, easily customizable and powerful
- The architecture allows more experienced developers to package any customization as a plugin by itself making your own software as flexible and reusable as the framework itself.

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Why Plone CMS ..

- Custom changes are always completely separate from the original code
- An undo-tab allows you to revert to older versions
- The very limited costs of testing
- Basic errors in typing or formatting result in descriptive error messages often pointing out the exact line and position of the failure in the code

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Why Plone CMS ..

- A poor and error prone scripting language with a large audience of users (PHP; Joomla and Drupal)
- A powerful but inflexible and time-consuming programming language whose main strength is found in larger enterprise application backends (Java; Alfresco)
- A mature and powerful agile object oriented scripting language best appreciated by the most innovative happy few of developers on this planet, who were responsible for some of the most ground-breaking improvements over the past few years, for example: GMail, the GMailFS hack, Blogger, the first Podcasting software, BitTorrent and SpamBayes (Python; Plone)

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Case study

- There are enough case studies about plone in various industries
  - Varies from Accounting, Aerospace & defense, agriculture & forestry, Arts & Entertainment, customer service, biotechnology, E-commerce, Automotives, Employment, financial services ,government, health care, military, publishing & printing, Real estate etc ..
- http://plone.net/case-studies
- www.iosn.net
- www.boston.com
- www.lynn.edu

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Content types

- Plone web pages constituted with content items
- working with plone means viewing , editing or sorting items opposed to static web pages
- Plone built in type of items
- pages, news items & events
- images and files
- Links & favorites
- Folders & collections

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Folders & collections

- Folders group items from a plone website together
- Collections consolidate related items from multiple folders
- Using folders and collections you can structure your content & retain overview

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Plone 3 Features

1. A big HTML editor
2. Rich Text Fields
3. New Sharing Tab
4. Plone WorkFlows
5. Link Integrity
6. Versioning , staging & Locking
7. Live search & advanced search
8. Automatic Full Text searching of word / pdf (document server)
9. User Controlled Portlets

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Plone 3 Features

- A Big HTML Editor
- Kupu Plone graphical HTML editor Features
- Named anchors
- Automatic image resizing
- Image captions
- Inserting of Flash and other embeddable videos (eg:youtube)
- Span/Character styles

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Kupu Features

- Why should I use Plone's default visual editor (Kupu)?
- Plone features an integrated visual editor called Kupu, Why is this the preferred editor of Plone?
- Although you can use alternative editors with Plone, such as FCKeditor, There are several good reasons to prefer Kupu. This is why Kupu is both the default and recommended visual editor of Plone.
- Kupu is tightly integrated with Plone ,In the evolution from Plone 2.1 to 2.5 and 3.0 Kupu became more and more powerful and was integrated more tightly with Plone

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Kupu Features

- Kupu's look & feel is consistent with Plone's.
- Kupu's internal link dialog retrieves site information from Plone, so you don't need to lookup internal URL's.
- You can insert images stored in Plone into rich text
- Kupu is not just for simple pages: it can be used to edit rich text fields in your own Archetypes-based content types.
- Kupu is used by other optional products, such as PloneFormGen and Ploneboard.
- Kupu's configuration is integrated in Plone's Site setup.
- Kupu is part of Plone's standard distribution. You don't need to install it separately

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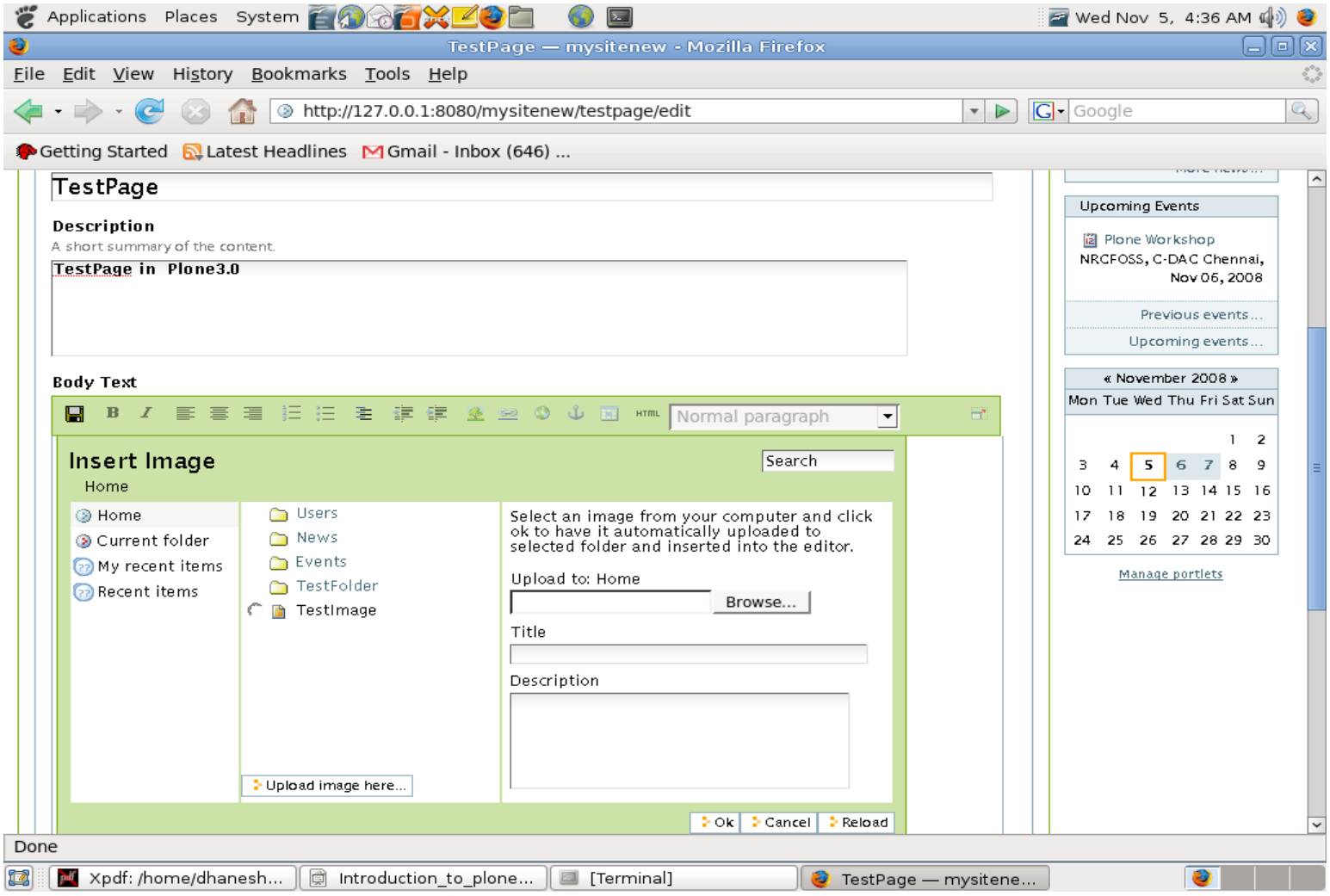
Adding an Image



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Rich Text Fields

- Collections (smart folders) which are simple build-your-ownquery listings of content, have Rich Text field ,which means you can easily write a nicely formatted introduction to a dynamic listing of content

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The New Sharing Tab

- Plone's fantastic system of sharing permissions on content
- why you need permissions ?
- You can use this single, elegant screen to add give new users & groups the permission to view, to edit and to add new content in a folder.

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New Sharing Tab

- Precise permissions on Contents
- Give permissions to new users and groups to add , edit ,review, publish contents .
- View and publishing the contents.
- Suitable for huge Intranet / Extranet solutions

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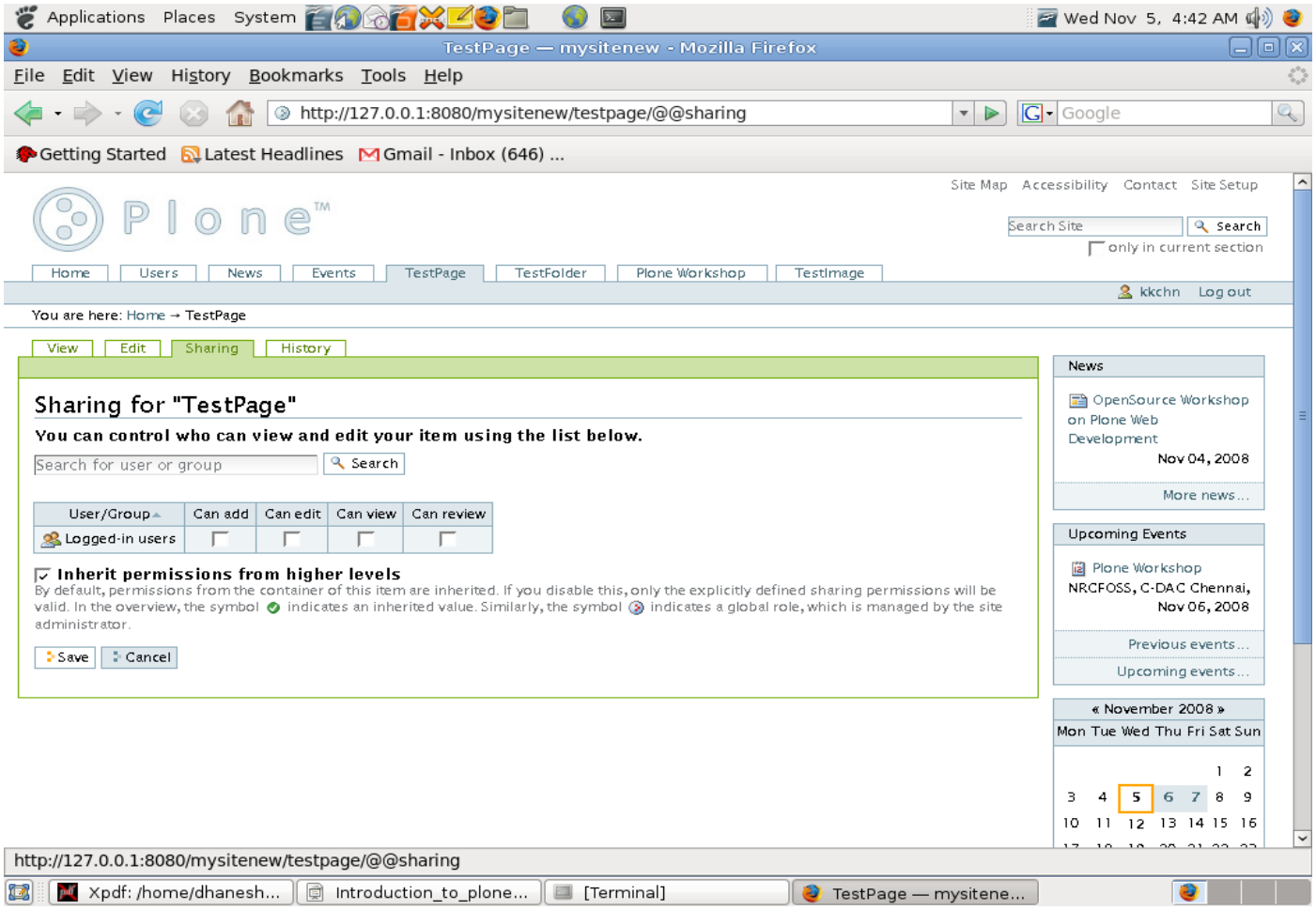
Sharing Tab Screen Shots



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WorkFlows

- Workflow is a chain of events or actions on your data to achieve an object
- State & transitions “state: information about an item at particular moment eg : private,public,pending & draft”
- Content will start with a start state go through a series of states and reach an end state .
- Transition is the movement from one state to another it connects the start state and end state
- Transition by user interaction or by scripts .

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WorkFlow Example

- A credit card system
- Draft: The credit card bill has been prepared and sent to me
- Review: The credit card bill has been received and being reviewed
- Paid: The credit card bill has been paid, and forgotten about forever
- Now transitions on the above states , For each of these states, at least one transition that occurs to move the bill from one state to another
- Post: The bank sends the credit card bill
- Pay: I pay the credit card bill
- Reject: Something is wrong on the bill, and it isn't approved

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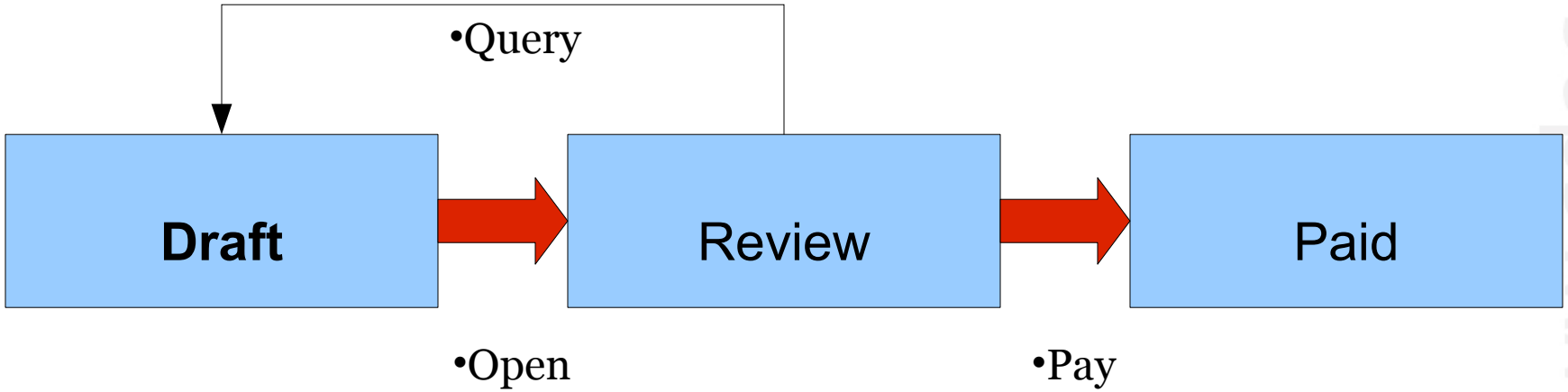
WorkFlow : Diagram



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Plone Workflows

- Plone3 ships with several simple,powerful,mature workflows
- Work flow design support simple publication sites, community sites, intranet/extranet for larger organizations .
- Workflow lets transition of a piece of content through a series of states. With different permissions or be reviewed by different people

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Plone simple workflow : Diagram

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Link Integrity :No more broken links

- Plone 3 has a powerful new “link integrity” feature
- Makes sure you never break hyperlinks within your site as you move or delete content.
- Try to delete an image that is used in several pages

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Versioning , Staging & Locking

- Document versioning. Versioning allows you to save old versions of a page, compare your current version to older versions, and even to roll back to previous versions
- Staging
- Locking
- Plone 3 shows what added and deleted between versions

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Searching

- Built-in Search Engine
- As soon as content is submitted to Plone it is indexed and available in the search engine to anybody with permission to see that content.
- The search engine makes it extremely easy for visitors to find the specific content they want, including print or web articles, podcasts, videos, photo galleries and blog entries.
- Live Search enables the visitor to see search results in real time as keywords are entered into the search field.
- Advanced Search lets the visitor target search results by author, date, content type (blog post, article, photo gallery, etc.)

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Automatic Full Text searching of word/pdf

- Plone 3 automatically indexes the entire text of Word and PDF files that you upload.
- You can index other kinds of documents, too, with simple add-on Products
- Again, this is a killer feature for intranets, and for any other site that has a lot of document-centric content to share with the world. This only happens auto-magically if you have wvware (for Word) and pdftoext or xpdf already installed on your system.

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User Control portlets

- Plone 3 has a entirely new “portlets” system.
- Portlets are those little chunks of content that appear in the sidebars of a site.
- You used to have to go into the ZMI backend to manage them in older versions. Now you just click on “Manage Portlets,” then drag and drop your way .

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Conclusion

- Plone 3 is well Engineered OpenSource product
- Incredible level of power
- Legendary ease-of -use & Community support .
- References : www.plone.org
- IRC #plone
- Plone mailing lists ,
- www.zope.org

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Thank You

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