Joomla 1.6
Lifting the lid ...

Andrew Eddie - 7 June 2009
The bad news ...

He who rejects change is the architect of decay. The only human institution which rejects progress is the cemetery.

*Harold Wilson*

Change is always required to progress software and for Joomla 1.6, this is no exception.
System Changes

- Significant upgrade in server requirements
- PHP 5.2+
- MySQL 5.0.4+
- Joomla 1.6 will not work at all on less!

The importance of checking your hosting now cannot be overstated. Hosts running retired versions of PHP and MySQL won’t support Joomla 1.6.
Extension Design

• No legacy mode - extensions must run 1.6 native
  [Link: http://www.theartofjoomla.com/converting-old-extensions.html]

• ACL not fully backward compatible

• Default template layouts will change

• Legacy layout pack will be provided

• JForm (<params> to <fields>)

Extension designers must prepare for the jump to Joomla 1.6. If you are running natively on the Joomla 1.5 Framework API, you are in a good place. If your extension relies on Legacy Mode, it will not work at all in Joomla 1.6. Some small changes to your core code will be required to bring extensions in line with the new ACL features.
Removed

• 1.0 legacy layer (plugins, files)
• Polls component
• PDF support?
• XML-RPC application and plugins
  • replaced with protocol controllers
    http://groups.google.com/group/joomla-dev-cms/msg/fc456fb178026163?hl=en-GB
Removed

- **API:**
  - patTemplate, DOMIT, PEAR
  - phpgacl (rewritten into the framework)
  - phpInputFilter, phputf8, tcpdf
- Administrator mod_stats, mod_footer
- xstandard editor

Users of patTemplate should move to using JView. The built-in XML handling in PHP 5 removes the need for DOMIT (which is no longer maintained).
Moved

- Openid libs to plugin
- Geshi to plugin (currently AWOL??)
Major Changes

- Sections removed (merged into categories)
- Frontpage to Featured
- Frontend com_user to com_users
- Mootools 1.2 (with every attempt to make frontend jQuery and ‘others’ friendly)
- All frontend layouts redesigned

The two-level section–category hierarchy will be merges into a single categories tree. This will affect the frontend layouts and arrangements of menu items. Every attempt will be made to make the frontend jQuery (or other JS framework) agnostic *except* where the core extensions require Mootools to provide functionality.
Major Changes

• Frontend mod_mainmenu to mod_menu
• Parameters stored in JSON (not INI)
• Language files must be re-written to conform with INI standard
• Some URLs will change

Language file keys will no longer be able to contain spaces and punctuation. All core language strings are being reworked with namespacing to give translators more opportunities to place the use the most contextually correct word or phrase in appropriate locations. Some URL will inevitably change (mainly due to the merging of sections and categories).
At this time, the impact of upgrading from 1.5 to 1.6 is an unknown quantity.
But there is always a bright side.
Ron Severdia has freshened the administrator template.
We are experimenting with new menu structures to improve productivity and allow people unfamiliar with Joomla to find key tasks.
New toolbar buttons are included to improve productivity. Save & New allows you to save a current item and return to a ‘new’ form without going back to a list, saving a few clicks. Save as Copy allows you to open an existing item and save it as a copy.
Trash management is now a default behaviour and integrated in administrator lists. You cannot delete any item. You must first put them in the trash (allowing you to undo). A further safety measure for accidental deletion is that you cannot permanently remove an item from the trash unless you explicitly change the published state filter to show only the trashed items.
Users are now allowed to be placed in more than one user group.
Manage User Groups

Groups can now be added or modified.
Assign Base Actions to Groups

User groups can have a certain level of permissions assigned to them (we call them Type 1 rules).
Manage Access Levels

Access levels can now be added or modified.
An access level can be mapped to a user group. This allows those users in that group to ‘view’ content items assigned to that access level. In the example above, users in the ‘Park Rangers’ group can see ‘Confidential’ content.
ACL Terminology

- Type 1 Rules (group permissions)
  What can I do?

- Type 2 Rules
  What can I do to a particular thing?

- Type 3 Rules (access levels)
  What can I see?

Type 1 rules map to the user groups. Type 3 rules allow users in groups to view items in a particular access level. Type 2 rules, for example, will allow you to only create or edit articles in particular categories.
Third-party developers can now add multiple (limited only by the screen real-estate) tabs to the component configuration screen.
Nested categories are now supported for each core extension (articles, banners, newsfeeds, contacts, weblinks).
Categories now have options supported (the old parameters) as well as conventional metadata.
Menu management is being more closely linked to modules. In the appropriate places, the integrated with modules will be shown. ‘Rebuild’ allows you to fully rebuild the menu tree in the event is gets ‘out of whack’.
New Menu Item Filters and Batch Changes

More filters are available in the menu item list view. Batch operations will allow you to update the properties (access level) selected items. You will also be able to move trees and sub-trees to specific locations in the current or other menus (not just the top).
You will now change the type of link in the menu item edit form. There may also be some indication of what modules are mapped to this item (still experimental and subject to change). Third-party developer have the opportunity of adding more panes to the slider if they desire.
More Wet Concrete

Some more experimentation.
Clicking the ‘Change’ button in the menu item bring up all the options available to you (less clicks).
The extension manager has been revised.
Unified Manager

Management of extensions is now unified in the one list.
You can discover extensions that have not gone through the normal installation process. This provides a solution for large-payload extensions. They can be uploaded to the site and then ‘discovered’.
Redirect

Redirect is a new component and plugin that detects 404 Page not found errors. It collects these automatically and you can optionally assign permanent redirects.
Other bits & pieces

- Focus on accessibility front and back end
- Plugins can modify all edit forms with JForm
  - User profiles
  - Custom metadata solutions
- tp=1 can be turned off

The new JForm API allows for plugins to be developed to affect the display or saving of form data. For example, this can allow for extended user profiles, the addition of custom metadata schemes and so on.
Other bits & pieces

• Layout overrides for all administrator components and modules
• CodeMirror editor
• TinyMCE upgraded

Layout overrides in the administrator allow you to provide custom solutions for customers where you might like to ‘dumb down’ the interface, or even change the terminology to in-house jargon.
Still to Come

- Fix all the broken stuff
- Fix Type 2 access control rules
- Make front-end layouts clean and semantic
- Add new comments and ratings extension
- Fix plugins that hardcode output (TOC)
Get Involved

- http://groups.google.com/group/joomla-dev-cms
- Feature patches
Beta and beyond?

- Targeting Beta 1 on or about 3 August 2009
- Feature set is frozen
- As many Beta’s as it takes to stabilise the stack (but hopefully only 3 or 4)
Thanks to Roarz Computing, Zac-Ware, Jumar Solutions Australia, PB Web Development and the Sydney and Melbourne Joomla Users Groups for supporting New Life in IT (http://www.newlifeinit.com) to develop parts of what you have just seen.