

Fundamentals of Joomla! Extension Development

The Filesystem & Database

Joomla! Extension Types

- Modules
- Components
- Plugins

Modules

News & Events

Latest Events

APR HUBbub 2010

13

Workshop for the HUBzero User Community
What's the hubbub? A platform fo ...

More events ▾

Latest News

FEB Doing science on the hub

17

International Science Grid This Week -
Feature The HUBzero platform will ...

NOV

16

Purdue Highlights Cloud Computing Tools at
SC09

Facebook for scientists -- but built to facilitate
serious research rather ...

SEP

12

Purdue receives \$105M to lead earthquake
engineering network

Advancing research and education to reduce
the devastation and loss of ...

More news ▾

Components

<http://hubzero.org/events>

<http://hubzero.org/news>

You are here: Events > 2010 > 04

Events: 2010/04

[Add an event](#)

Year Month Week Day

01 Apr, 2010 HUB Owners' Forum
01:00 PM to 02:00 PM
Category: Meeting
This regular meeting lets Hub owners interact with the HUBzero development team. The HUBzero team will start each meeting by giving an overview of recent developments. Hub owners will be asked for their feedback about outstanding issues and relative priorities.

13 Apr, 2010 HUBbub 2010
08:00 AM
Category: Workshop

All Categories 2010

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

You are here: News Archive

News Archive

FEB 17 Doing science on the hub
International Science Grid This Week - Feature The HUBzero platform will ...

NOV 16 Purdue Highlights Cloud Computing Tools at SC09
Facebook for scientists -- but built to facilitate serious research rather ...

SEP 12 Purdue receives \$105M to lead earthquake engineering network
Advancing research and education to reduce the devastation and loss of ...

MAY 11 Indiana translational medicine institute pioneers secure federated identity management
Translational medicine researchers from across the country can now access ...

FEB 13 Purdue, IU consortium aims to drive new era for research, education online
A powerful Web platform that allows scientists to share research modeling ...

Plugins

Keyword(s)

All Categories (192)

- Resources (123)
 - Animations (2)
 - Courses (3)
 - Downloads (2)
 - Learning Modules (2)
 - Notes (17)
 - Online Presentations (60)
 - Publications (6)
 - Teaching Materials (8)
 - Tools (21)
 - Workshops (2)
- Tags (12)
- Events (8)
- Topics (13)
- Members (26)
- Groups (2)
- Articles (8)

Log in to IndianaCTSI

Sign in with your institutional credentials

Select your institution...

Select your institution...

- Educational -

 IU: All IU Campuses

 Notre Dame University

 Purdue University

 Stanford University

 UIowa: University of Iowa

- Public -

 Google

IndianaCTSI

Protect Network

- Research -

 NIH: National Institutes of Health

Joomla! Administration

Partners

/about/partners



NSF Network for Computational Nanotechnology

The NCN's vision is to connect theory, experiment, and computation in a way that makes a difference to the future of nanotechnology - both in research and education. It brings together theorists and computational scientists in the physical disciplines, computer scientists, and experimentalists who address focused research projects that begin at the atomic level and proceed to the system scale. The NCN supports research on nanoelectronics, NEMS, and their application to nano-bio systems. To support these efforts, a web-based infrastructure provides high-performance computing, visualization, web-based simulation and collaboration, and leadership meetings and workshops. Finally, the NCN is creating educational resources that use simulation to make abstract concepts come alive to students at all levels.



MARCO Focus Center for Materials, Structures and Devices

The mission of the MSD Center is to explore the most promising paths for microelectronics in the next two to three decades by pursuing two overlapping approaches:

- Scaling of CMOS to its ultimate limit, and
- Interdisciplinary exploration of new-frontier devices

The Center has successfully launched entirely new materials combinations for high performance CMOS applications, while pushing new frontier devices, such as carbon nanotubes, to new heights. The Center is also exploring the combination of novel chemical synthesis of nanomaterials with advanced front-end processes borrowed from silicon technology.

Article: [Edit]

Preview Save Apply Close Help

Title: Partners Published: No Yes
Alias: partners Front Page: No Yes
Section: About Category: About

Article ID: 254 State: Published Hits: 12364 Revised: 22 Times Created: Tuesday, 25 January 2005 17:22 Modified: Friday, 20 November 2009 18:25

Parameters (Article)
Author: Administrator Author Alias: Access Level: Public Created Date: 2005-01-25 17:22:46 Start Publishing: 2005-01-25 00:00:00 Finish Publishing: Never

Parameters (Advanced)

Metadata Information

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MARCO Focus Center for Materials, Structures and Devices (MSD)
The mission of the MSD Center is to explore the most promising paths for microelectronics in the next two to three decades by pursuing two overlapping approaches:

- Scaling of CMOS to its ultimate limit, and
- Interdisciplinary exploration of new-frontier devices

The Center has successfully launched entirely new materials combinations for high performance CMOS applications, while pushing new frontier devices, such as carbon nanotubes, to new heights. The Center is also exploring the combination of novel chemical synthesis of nanomaterials with advanced front-end processes borrowed from silicon technology.

/administrator?option=com_content&task=edit&cid[] = 254

Module Storage - Database

Site Menus Content Components Extensions Tools Help

Module Manager

Install/Uninstall Module Manager Plugin Manager Template Manager Language Manager

Enable Disable Copy Delete Edit New Help

[Site](#) | [Administrator](#)

Filter: Go Reset - Select Template - - Select Position - - Select Type - - Select State -

#	<input type="checkbox"/>	Module Name	Enabled	Order	Access Level	Position	Pages	Type	ID
1	<input type="checkbox"/>	About		3	Public	left	Varies	mod_mainmenu	17

```
mysql> select title, published, ordering, access, position, (select group_concat(menuid) from jos_modules_menu where moduleid = id) as pages, module, id from jos_modules where module not in ('mod_menu', 'mod_submenu', 'mod_dashboard') order by title limit 10;
+-----+-----+-----+-----+-----+-----+-----+-----+
| title | published | ordering | access | position | pages | module | id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| About | 1 | 3 | 0 | left | 9,17,20,21,22,57,58,59,60 | mod_mainmenu | 17 |
| Announcements | 1 | 3 | 0 | frontLeft | 4 | mod_events_latest | 99 |
| default | 0 | 2 | 0 | left | 0 | mod_mainmenu | 51 |
| Events Announcements | 0 | 1 | 0 | frontRight | 4 | mod_news | 56 |
| Events Calendar | 0 | 1 | 0 | frontLeft | 4 | mod_events_cal | 53 |
| Extended Statistics | 1 | 4 | 0 | userInfo | NULL | mod_xstats | 77 |
| Extended Who is Online | 1 | 3 | 0 | userInfo | NULL | mod_xwhosonline | 62 |
| Featured Profile | 1 | 3 | 0 | feature | 0 | mod_featuredmember | 88 |
| Featured Question | 1 | 4 | 0 | feature | 4 | mod_featuredquestion | 93 |
| Featured Resource | 1 | 2 | 0 | feature | 0 | mod_featuredresource | 89 |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

10	<input type="checkbox"/>	Featured Resource				2	Public	feature	All	mod_featuredresource	89
----	--------------------------	-------------------	--	--	--	---	--------	---------	-----	----------------------	----

Module Storage - Filesystem

```
user@hub001:/www/myhub$ ls modules/ administrator/modules/
administrator/modules/:
index.html mod_dashboard mod_footer mod_logged mod_menu mod_popular mod_stats mod_submenu mod_toolbar
mod_custom mod_feed mod_latest mod_login mod_online mod_quickicon mod_status mod_title mod_unread

modules/:
index.html      mod_findresources   mod_mymessages   mod_poll          mod_reportproblems mod_whosonline
mod_archive     mod_footer         mod_myprofile    mod_polttitle    mod_resourcemenu  mod_wishvoters
mod_banners      mod_latestnews    mod_myquestions  mod_popularfaq   mod_search        mod_wrapper
mod_breadcrumbs  mod_latestusage  mod_mysessions   mod_popularquestions mod_sections      mod_xflash
mod_custom       mod_login         mod_mytickets   mod_quicktips    mod_slideshow    mod_xlogin
mod_events_cal   mod_mainmenu      mod_my submissions mod_quotes        mod_sliding_panes mod_xlogin_mini
mod_events_latest mod_mostread     mod_mytools      mod_random_image mod_spotlight    mod_xpoll
mod_featuredmember mod_mycontributions mod_mywishes    mod_randomquote  mod_stats        mod_xsearch
mod_featuredquestion mod_myfavorites mod_newsflash   mod_rapid_contact mod_syndicate   mod_xwhosonline
mod_featuredresource mod_mygroups   mod_notices     mod_recentquestions mod_toptags
mod_feed         mod_mymeetings
```

Module Administration - mod_custom

Module: [Edit]

Details

Module Type:	mod_custom
Title:	HUB Footer
Show Title:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Enabled:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Position:	footer
Order:	0:HUB Footer
Access Level:	Public Registered Special
ID:	57
Description:	This Module allows you to create your own HTML Module using a WYSIWYG editor.

Parameters

Module Parameters

Module Class Suffix	
---------------------	--

Menu Assignment

Menus: All None Select Menu Item(s) from the List

Menu Selection:

- about**
 - About Us
 - Contact Us
 - How to Cite HUBzero
 - Notable Quotes
 - Usage Statistics
 - Copyright Infringement Notification
 - Feedback
 - Our Cyberinfrastructure
 - Employment Opportunities
- default**
 - default
 - legal

Custom Output

```
<div class="four columns first">
    <h3>The Platform</h3>
    <ul>
        <li><a href="/documentation">Documentation</a></li>
        <li><a href="/tour/features">Features</a></li>
        <li><a href="/tour/hosting">Hosting</a></li>
    </ul>
</div>
<div class="four columns second">
    <h3>The Organization</h3>
    <ul>
        <li><a href="/about">About us</a></li>
        <li><a href="/about/contact">Contact us</a></li>
        <li><a href="/legal/terms">Terms of Use</a></li>
    </ul>
</div>
```

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HUBzero.org

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nanohub.org

Component Storage - Database

The screenshot shows the HUBzero component storage interface. On the left is a sidebar with a tree view of components. The 'Contacts' node under 'Components' is selected, highlighted in green. To its right are two tabs: 'Contacts' and 'Categories'. A MySQL command is displayed in the main area:

```
mysql> select name, `option`, ordering, NULL as params, id from jos_components where `option` != 'com_account' group by `option` order by ordering, name limit 10;
```

name	option	ordering	params	id
404 SEF	com_sef	0	NULL	135
Answers	com_answers	0	NULL	77
Articles	com_content	0	NULL	20
Banners	com_banners	0	NULL	1
Cache Manager	com_cache	0	NULL	32
Citations Manager	com_citations	0	NULL	92
Configuration Manager	com_config	0	NULL	21
Contacts	com_contact	0	NULL	7
Contribtool	com_contribtool	0	NULL	103
Contribute	com_contribute	0	NULL	78

Component Storage - Filesystem

```
user@hub001:/www/myhub$ ls components/ administrator/components/
administrator/components/:
com_admin      com_contact     com_frontpage   com_massmail    com_plugins    com_support    com_users      com_xsearch
com_answers     com_content     com_groups      com_media      com_poll       com_tags       com_weblinks  index.html
com_banners     com_contribtool com_hub        com_members    com_resources  com_templates com_whatsnew
com_cache       com_contribute  com_installer   com_menus     com_search     com_tools     com_whois
com_categories  com_cpanel     com_jobs       com_messages   com_sections  com_topics    com_wishlist
com_checkin     com_events     com_kb         com_modules   com_sef        com_trash     com_xflash
com_citations   com_features   com_languages  com_myhub     com_services  com_usage     com_ximport
com_config      com_feedback   com_login      com_newsfeeds com_store      com_userpoints com_xpoll
```



```
components/:
com_answers     com_contribute com_infrastructure com_myhub      com_sef       com_usage      com_xflash
com_banners     com_events    com_jobs          com_newsfeeds com_store     com_user       com_ximport
com_citations   com_features  com_kb           com_poll      com_support  com_weblinks  com_xpoll
com_contact     com_feedback  com_mailto        com_register  com_tags     com_whatsnew  com_xsearch
com_content     com_groups   com_media         com_resources com_tools     com_wishlist  index.html
com_contribtool com_hub      com_members      com_search    com_topics   com_wrapper
```

Component Administration - com_events

Event: [Edit]

[Manage Events](#) | [Manage Events Categories](#) | [Edit Config](#)

Event

Title:	HUBbubble 2010
Category:	Workshop
Activity:	Workshop for the HUBzero User Community What's the hubbubble? A platform for creating web sites that support scientific research, education, and collaboration, released as open source during the workshop! The HUBzero Platform is the basis of nanoHUB.org and 20 other sites, delivering hundreds of scientific tools and seminars to more than 350,000 visitors each year. HUBzero is supported by a consortium of universities
Where:	IUPUI Conference Center
Contact:	
Website:	http://hubzero.org/hubbubble2010
Tags:	

Publishing

Start date	2010-04-13	Start Time	08:00	AM
End date	2010-04-14	End Time	05:00	PM
Repeat type	<input checked="" type="radio"/> Every day <input type="radio"/> 1 * per Week <input type="radio"/> n * per Week <input type="radio"/> Week(s) of a month <input type="radio"/> 1 * per Month <input type="radio"/> Each end of the month <input type="radio"/> 1 * per Year	<input type="radio"/> By day number <input checked="" type="radio"/> S M T W T F S <input type="radio"/> S		

Status

State	Published
Hits	0
Created	2010-01-19 13:46:40
Created by	Beth Schroeder
Last modified	2010-03-14 16:44:47
Modified by	Michael McLennan

You are here: [Events](#) > [2010](#) > [04](#) > [13](#) > HUBbubble 2010

Events: 2010/04/13

[Add an event](#)

[Year](#) [Month](#) [Week](#) [Day](#)

HUBbubble 2010

Category: Workshop

Description: Workshop for the HUBzero User Community

What's the hubbubble? A platform for creating web sites that support scientific research, education, and collaboration, released as open source during this workshop! The HUBzero Platform is the basis of nanoHUB.org and 20 other sites, delivering hundreds of scientific tools and seminars to more than 350,000 visitors each year. HUBzero is supported by a consortium of universities including Purdue, Indiana, Clemson, and Wisconsin.

April

S	M	T	W	T	F	S
					1	2
					3	
					4	5
					6	7
					8	9
					10	
					11	12
					13	14
					15	16
					17	
					18	19
					20	21
					22	23
					24	
					25	26
					27	28
					29	30

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NCN
nanohub.org
NSF

Plugin Storage - Database

Site Menus Content Components Extensions Tools Help

Preview 0 1 Logout

Plugin Manager

Install/Uninstall
Module Manager
Plugin Manager
Template Manager
Language Manager

Enable Disable Edit Help

Filter: Go Reset - Select Type - - Select State -

#	<input type="checkbox"/>	Plugin Name	Enabled	Order	Access Level	Type	File	ID
1	<input type="checkbox"/>	Authentication - GMail		5	Public	authentication	gmail	3

```
mysql> select name, published, ordering, access, folder, element, null as params, id from jos_plugins order by name limit 10;
+-----+-----+-----+-----+-----+-----+-----+-----+
| name | published | ordering | access | folder | element | params | id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| Authentication - GMail | 0 | 5 | 0 | authentication | gmail | NULL | 3 |
| Authentication - Joomla | 1 | 2 | 0 | authentication | joomla | NULL | 1 |
| Authentication - LDAP | 0 | 3 | 0 | authentication | ldap | NULL | 2 |
| Authentication - OpenID | 0 | 4 | 0 | authentication | openid | NULL | 4 |
| Authentication - xHUB | 1 | 1 | 0 | authentication | xauth | NULL | 57 |
| Content - Code Hightlighter (GeSHi) | 0 | 5 | 0 | content | geshi | NULL | 15 |
| Content - Email Cloaking | 1 | 5 | 0 | content | emailcloak | NULL | 14 |
| Content - Imbed PHP | 1 | 10 | 0 | content | kl_php | NULL | 143 |
| Content - Load Module | 1 | 6 | 0 | content | loadmodule | NULL | 16 |
| Content - Page Navigation | 1 | 2 | 0 | content | pagenavigation | NULL | 17 |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

10	<input type="checkbox"/>	Content - Page Navigation				2	Public	content	pagenavigation	17
----	--------------------------	---------------------------	--	--	--	---	--------	---------	----------------	----

Plugin Storage - Filesystem

```
user@hub001:/www/myhub$ ls plugins/ administrator/plugins/
ls: cannot access administrator/plugins/: No such file or directory
plugins/:
authentication  editors-xtd  members    search    tageditor  usage     xauthentication  xmlrpc
content         groups       mw        support   tags       user      xhub          xsearch
editors         index.html  resources  system    tmp       whatsnew  xmessage
```

Generic Extension Administration - Parameters

```
<params>
    <param name="enabled" type="radio" default="1" label="Enable Plugin" description="PARAMENABLED">
        <option value="0">No</option>
        <option value="1">Yes</option>
    </param>
    <param name="title" type="radio" default="1" label="Site Title" description="PARAMSITETITLE">
        <option value="0">No</option>
        <option value="1">Yes</option>
    </param>
    <param name="multipage_toc" type="radio" default="1" label="Table of Contents" description="PARAMSITETOC">
        <option value="0">Hide</option>
        <option value="1">Show</option>
    </param>
    <param name="showall" type="radio" default="1" label="Show All" description="PARAMSITESHOWALL">
        <option value="0">Hide</option>
        <option value="1">Show</option>
    </param>
```



The diagram illustrates the relationship between the XML configuration, the plugin interface, and the database table. Arrows point from the XML code to the 'Parameters' tab in the interface, and from the interface to the database query results.

XML Configuration:

```
<params>
    <param name="enabled" type="radio" default="1" label="Enable Plugin" description="PARAMENABLED">
        <option value="0">No</option>
        <option value="1">Yes</option>
    </param>
    <param name="title" type="radio" default="1" label="Site Title" description="PARAMSITETITLE">
        <option value="0">No</option>
        <option value="1">Yes</option>
    </param>
    <param name="multipage_toc" type="radio" default="1" label="Table of Contents" description="PARAMSITETOC">
        <option value="0">Hide</option>
        <option value="1">Show</option>
    </param>
    <param name="showall" type="radio" default="1" label="Show All" description="PARAMSITESHOWALL">
        <option value="0">Hide</option>
        <option value="1">Show</option>
    </param>
```

Plugin Interface (Screenshot):

Database Query Results:

```
mysql> select params from jos_plugins where folder = 'content' and element = 'pagebreak';
+-----+
| params |
+-----+
| enabled=1
| title=1
| multipage_toc=1
| showall=1
+-----+
```

Exercise! XML Install Manifests

- Download http://hubzero.org/com_hubbub.tar
 - » Extract to a temporary directory
 - ✓ wget http://hubzero.org/com_hubbub.tar && tar xvf com_hubbub.tar /www/myhub/tmp/
- Edit hubbub.xml
 - » Personalized header tags to suit yourself
 - » Check out the rest of the tags to see what facilities are available

Exercise! XML Install Manifests

- Check out the entries in jos_components in MySQL
 - » Credentials are in /www/myhub/configuration.php
 - » Do you see how the fields there match up with tags in the XML manifest?
 - » Guess what a row for the Hubbub component would contain
- Visit your hub's /administration/ back-end and install the component from the temporary directory
 - » Visit your hub's /hubbub/ path to verify installation
 - » Check jos_components again

