

Using Geeklog as a Web Application Framework

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What is Geeklog?

Geeklog is a PHP/MySQL based application for managing dynamic web content.

- post "news"
- syndication
- comments
- trackbacks
- spam protection



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*When you want to know more
but don't know where to look.*

*IANAL. I am a journalist with a paralegal
background,
so if you have a legal problem and want
advice,
please hire an attorney.*

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LATEST NEWS PICKS

- [News from the Patent Commons Project](#)
The Patent Commons Project has two new whitepapers, "[Understanding Patent Pledges: Overview of Legal Considerations](#)" and "[A Developer's Guide to Using the Commons](#)", both PDF files. [OSDL's Patent Commons](#)
- [Dual boot Macs will be Linux 1.0 ready](#)

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Do you have a Troubleshooting Late-Breaker? [Email us.](#)

MFI is your destination for Windows on Mac (dual boot) and Universal Application coverage.
Resource Centers: [Boot Camp](#) | [Universal Applications](#).

Updated Friday, April 14 2006 @ 11:30 AM PDT

Today's Featured Article

☐ Late-Breakers

Special Report: Troubleshooting Boot Camp

Covering these topics:

- [Adjusting MacBook Pro screen brightness](#)
- [Benchmarks](#)
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- [Getting AirPort-connected printers to work](#)
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... and many others ...

Why use Geeklog?

- News + Static content
- Extensibility
- Hierarchical Groups & Permissions
- Focus on Security
- Open Source

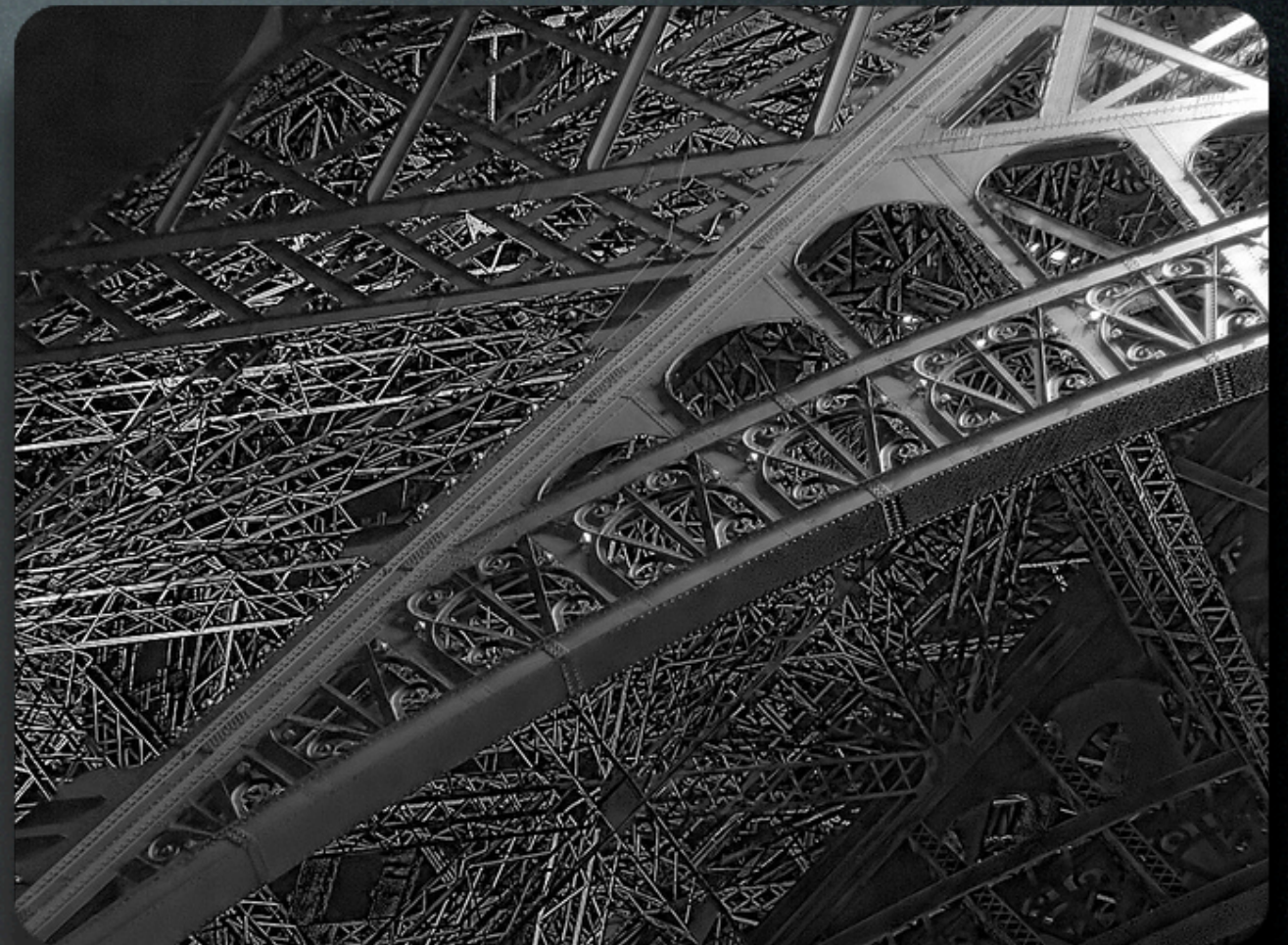


When not to use Geeklog

When your requirements include ...

- complex workflows
- interaction with proprietary protocols or applications

... then you'd better use something else.



Requirements

- PHP 4.1.0 or later
- MySQL 3.23.2 or later
(Microsoft SQL Server under development)
- Apache (any version), Zeus, IIS



Groups & Permissions

- Give access only to certain groups
- Inherit from groups: Hierarchies
- 'Rights' to fine-tune access



Group Manager



[[Create New](#) | [Admin Home](#)]

To modify or delete a group, click on that group's edit icon below. To create a new group, click on "Create New" above. Please note that core groups cannot be deleted because they are used by the system.

Search: Limit Results:

Edit	Group Name ▾	Description	Core Group	Members
	All Users	Group that a typical user is added to	Yes	
	Block Admin	Has full access to block features	Yes	
	Event Admin	Has full access to event features	Yes	
	forum Admin	Users in this group can administer the forum plugin	No	
	Group Admin	Is a User Admin with access to groups, too	Yes	
	Links Admin	Has full access to links features	No	
	Logged-in Users	All registered members	Yes	
	Mail Admin	Can use Mail Utility	Yes	
	Marketing	Access for Marketing Department only	No	
	Plugin Admin	Has full access to plugin features	Yes	
	Polls Admin	Has full access to polls features	No	
	Remote Users	Users in this group can have authenticated against a remote server.	Yes	
	Root	Has full access to the site	Yes	
	spamx Admin	Users in this group can administer the Spam-X plugin	No	
	Static Page			

Groups

Rights

A groups access to a certain right below can be given directly to the group OR to a different group that this group is a part of. The ones you see below without a checkbox are the rights that have been given to this group because it belongs to another group with that right. The rights with checkboxes below are rights that can be given directly to this group.

- | | | |
|--|--|---|
| <input type="checkbox"/> block.delete
(<i>event.moderate</i>) | <input type="checkbox"/> block.edit | (<i>event.edit</i>) |
| <input type="checkbox"/> forum.user
(<i>links.edit</i>) | <input type="checkbox"/> event.submit | <input type="checkbox"/> forum.edit |
| <input type="checkbox"/> plugin.edit | <input type="checkbox"/> group.delete
(<i>links.moderate</i>) | <input type="checkbox"/> group.edit |
| <input type="checkbox"/> staticpages.delete
(<i>story.edit</i>) | <input type="checkbox"/> polls.edit | <input type="checkbox"/> links.submit |
| <input type="checkbox"/> story.submit | <input type="checkbox"/> staticpages.edit
(<i>story.moderate</i>) | <input type="checkbox"/> spamx.admin |
| <input type="checkbox"/> user.edit | <input type="checkbox"/> topic.edit | <input type="checkbox"/> staticpages.PHP
(<i>story.ping</i>) |
| | <input type="checkbox"/> user.mail | <input type="checkbox"/> user.delete |

Rights

Access Rights

Owner: Admin

Group:

Permissions:

R = read, E = edit, edit rights assume read rights

Owner		Group		Members	Anonymous
R	E	R	E	R	R
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

NOTE: members is all logged in members of the site and anonymous is all users browsing the site that aren't logged in.

Permissions

Integration Options

- PHP Blocks
- Static Pages
- Hooks and Callbacks
- "roll your own"
- Plugin API



PHP Blocks

- a PHP function that returns something to be displayed in a side block
- prefix phpblock_
- located in lib-custom.php

```
function phpblock_whos_new()
{
    global $_CONF, $_TABLES;

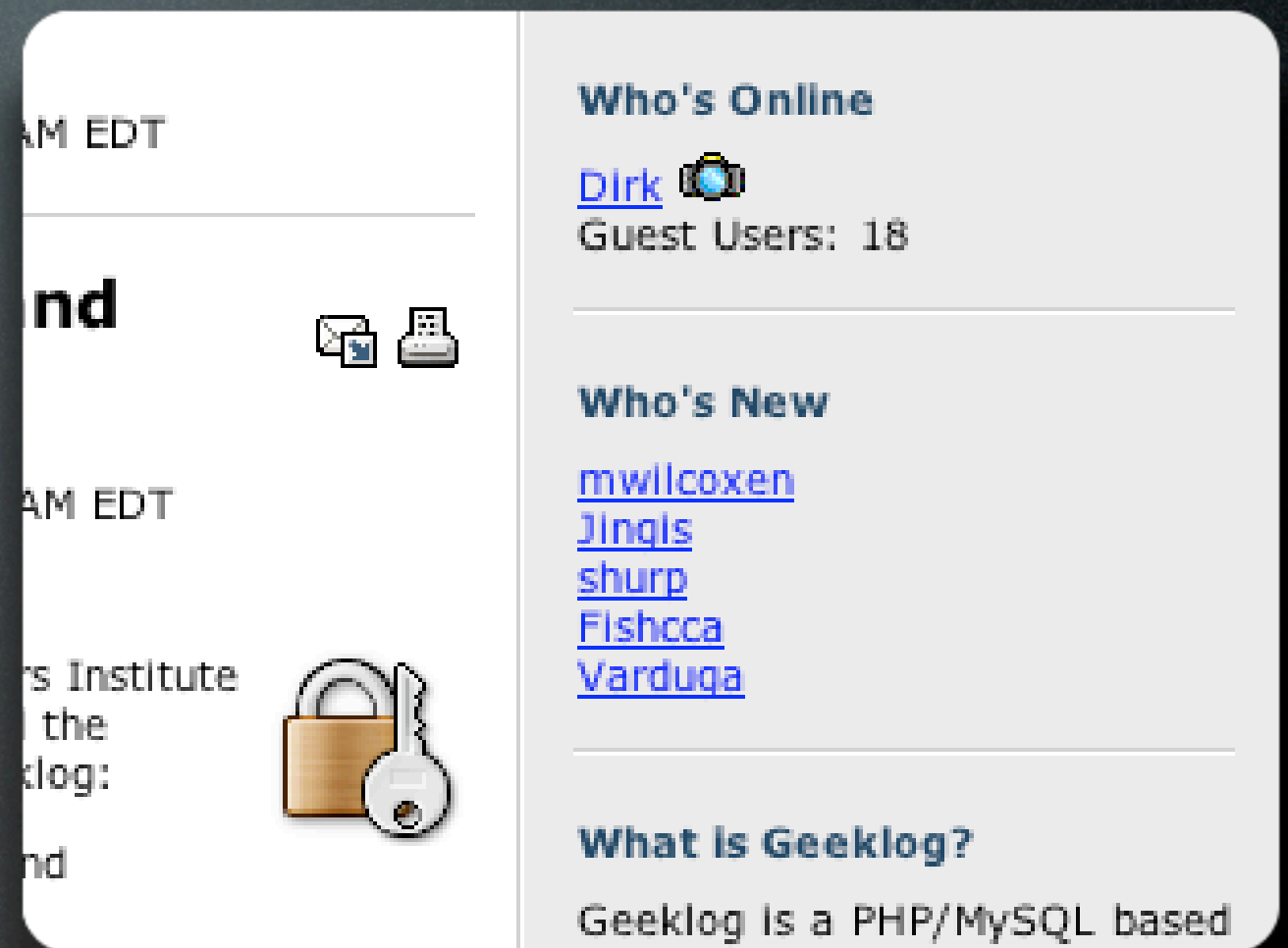
    $result = DB_query("SELECT uid,username,photo FROM {$_TABLES
['users']} WHERE status <> 0 ORDER BY regdate DESC LIMIT 5");

    $nrows = DB_numRows($result);
    for ($i = 0; $i < $nrows; $i++) {
        $A = DB_fetchArray($result);
        $retval .= '<a href="' . $_CONF['site_url'] . '/
users.php?mode=profile&uid=' . $A['uid'] . '">' . $A
['username'] . '</a>';

        if (!empty($A['photo'])) {
            $retval .= ' <a href="' . $_CONF['site_url'] .
'/users.php?mode=profile&uid=' . $A['uid'] . '"></a>';
        }
        $retval .= '<br>';
    }
    return $retval;
}
```


PHP Blocks

- a PHP function that returns something to be displayed in a side block
- prefix phpblock_
- located in lib-custom.php



Static Pages

- despite the name, Static Pages can also contain PHP code
- good for integrating short scripts
- often used for forms

```
global $_CONF, $_TABLES, $_DB_table_prefix;

$_TABLES['topstories'] = $_DB_table_prefix . 'topstories';

$stop = '<p>The 25 most visited stories during the last 8
days:</p>';

$result = DB_query ("SELECT sid,hits FROM {$_TABLES
['topstories']} ORDER BY hits DESC");
$num = DB_numRows ($result);

$stop .= '<ol>';

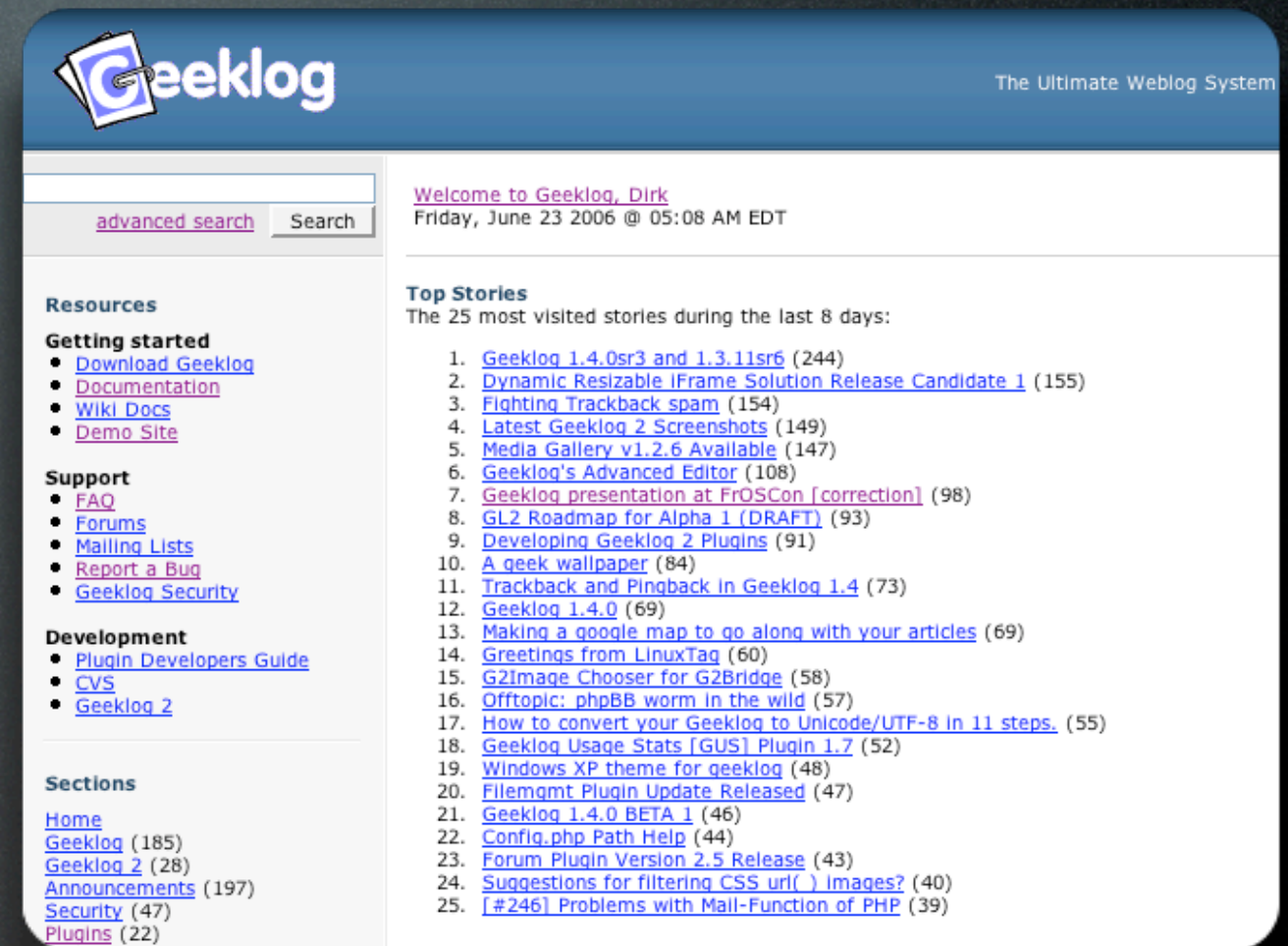
for ($i = 0; $i < $num; $i++) {
    list($sid, $hits) = DB_fetchArray ($result);
    $stop .= '<li><a href="' . COM_buildUrl ($_CONF
['site_url'] . '/article.php?story=' . $sid) . '">' .
stripslashes (DB_getItem ($_TABLES['stories'], 'title', "sid
= '$sid'")) . '</a> (' . $hits . ')</li>';
}

$stop .= '</ol>';

return $stop;
```


Static Pages

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- good for integrating short scripts
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Hooks and Callbacks

- Custom registration functions
- Dynamic block functions
- PHP in theme headers
- Override some built-in functions

```
/**
 * Check if it's okay to create a new user.
 */
function CUSTOM_userCheck ($username, $email)
{
    $msg = '';

    // Example: check that the new user has
    // entered their full name and complain
    // if it's missing
    if (empty ($_POST['fullname'])) {
        $msg = 'Please enter your full name!';
    }

    return $msg;
}
```


Roll your own

- include lib-common.php
- emit site header
- do whatever you want
- emit site footer

```
<?php
require_once( 'lib-common.php' );

echo COM_siteHeader();

// your code here

echo COM_siteFooter();


?>
```


Plugin API

- more than 50 API functions
- almost all optional
- central install / uninstall











Plugin List

[\[Admin Home \]](#)



To modify or delete a plugin, click on that plugin's edit icon below. This will show the plugin details including the authors's website. Both the installed version and the version returned from the plugin's code are shown. This will aid you to know if the plugin needs to be upgraded. To install or upgrade a plugin please consult its documentation.

Search: Limit Results:

Edit	Plugin Name ▾	Plugin Version	Geeklog Version	Enabled
	bad_behavior	1.2.4	1.3.10	<input checked="" type="checkbox"/>
	faqman	0.8	1.3.7	<input checked="" type="checkbox"/>
	filemgmt	1.5.2	1.4	<input checked="" type="checkbox"/>
	forum	2.3.2	1.3.8	<input checked="" type="checkbox"/>
	links	1.0	1.4.0	<input checked="" type="checkbox"/>
	messenger	1.0	1.3.8	<input checked="" type="checkbox"/>
	nettools	1.0	1.3.8	<input checked="" type="checkbox"/>
	polls	1.0	1.4.0	<input checked="" type="checkbox"/>
	spamx	1.0.3	1.4.0	<input checked="" type="checkbox"/>
	stationpages	1.4.2	1.4.0	<input checked="" type="checkbox"/>

plugin_abortsave_	plugin_install_
plugin_autotags_	plugin_ismoderator_
plugin_cclabel_	plugin_itemsaved_
plugin_centerblock_	plugin_moderationapprove_
plugin_checkforSpam_	plugin_moderationdelete_
plugin_chkVersion_	plugin_moderationvalues_
plugin_commentPreSave_	plugin_profileblocksdisplay_
plugin_deletecomment_	plugin_profileblocksedit_
plugin_displaycomment_	plugin_profileextrassave_
plugin_dopuginsearch_	plugin_profilevariablesedit_
plugin_feedExtensionTags_	plugin_runScheduledTask_
plugin_feedNSExtensions_	plugin_savecomment_
plugin_feedupdatecheck_	plugin_savesubmission_
plugin_getBlocks_	plugin_searchtypes_
plugin_getadminoption_	plugin_showstats_
plugin_getcommenturlid_	plugin_statssummary_
plugin_getfeedcontent_	plugin_submissioncount_
plugin_getfeednames_	plugin_submit_
plugin_getheadercode_	plugin_templatesetvars_
plugin_geticon_	plugin_uninstall_
plugin_getiteminfo_	plugin_upgrade_
plugin_getmenuitems	plugin_user_changed_

Plugin API functions


```
/**
 * This will put an option for static pages in the
 * "command and control" block on moderation.php
 */
function plugin_cclabel_staticpages()
{
    global $_CONF, $LANG_STATIC;

    if (SEC_hasRights
('staticpages.edit,staticpages.delete', 'OR')) {
        return array ($LANG_STATIC['staticpages'],
            $_CONF['site_admin_url'] .
                '/plugins/staticpages/index.php',
            plugin_geticon_staticpages ());
    }

    return false;
}
```

Sample API function


```

function plugin_autotags_staticpages ($op, $content = '',
                                      $autotag = '')
{
    global $_CONF, $_TABLES;

    if ($op == 'tagname' ) {
        return 'staticpage';
    } else if ($op == 'parse') {
        $sp_id = COM_applyFilter ($autotag['parm1']);
        if (empty ($autotag['parm2'])) {
            $linktext = DB_getItem ($_TABLES['staticpage'],
                                   'sp_title', "sp_id = '$sp_id'");
        } else {
            $linktext = $autotag['parm2'];
        }
        $url = COM_buildUrl ($_CONF['site_url'] .
                            '/staticpages/index.php?page=' . $sp_id);
        $link = '<a href="' . $url . '">' . $linktext .
                '</a>';
        $content = str_replace ($autotag['tagstr'], $link,
                                $content);

        return $content;
    }
}

```

[staticpage:] autotag

Geeklog vs. other frameworks

Why not use a modern, object oriented framework?

- object oriented; database abstraction layer; XML; ...

If you have the resources and the time, then by all means do it!

- i.e. hardware and software requirements; develop new code

Existing Integrations

- Gallery (1.x and 2.x)
 - phpBB
 - EWiki
- (MediaWiki under development)

The screenshot shows the Geeklog website interface. At the top, there is a navigation bar with links: [Contribute](#), [Calendar](#), [Advanced Search](#), [Site Statistics](#), [Directory](#), [Web Resources](#), [Polls](#), [Podcasts](#), and [Forums](#). Below this is the Geeklog logo and the tagline "Another Nifty Geeklog Site".

On the left side, there is a sidebar with several sections:

- advanced search** with a search box.
- Topics** with links: [Home](#), [General News](#) (0/0), [GeekLog](#) (1/1).
- Admins Only** with links: [Submissions](#) (2), [Stories](#) (1), [Blocks](#) (11), [Topics](#) (2), [Events](#) (0), [Users](#) (1), [Groups](#) (17), [Mail Users](#) (N/A), [Content Syndication](#) (1), [Trackback](#) (1), [Plugins](#) (6), [Static Pages](#) (N/A), [Spam-X](#) (N/A), [Links](#) (1), [Polls](#) (1), [Podcasts](#) (1), [Forum Panel](#) (N/A), [DB Backups](#) (N/A), [Documentation](#) (N/A), [GL Version Test](#) (1.4.1cvs).
- User Functions** with links: [My Calendar](#), [Private Messages](#), [Account Information](#), [Preferences](#).

The main content area displays a welcome message: "Welcome to Geeklog Site, Admin" and the current time: "Friday, May 05 2006 @ 08:33 pm CEST".

Below the welcome message, there are links: [FAQ](#), [Search](#), [Memberlist](#), [Usergroups](#), [Profile](#), [You have no new messages](#), and [Log out \[Admin \]](#).

It also shows the user's last visit: "You last visited on 05 May 2006 06:30 pm" and the current time: "The time now is 05 May 2006 06:33 pm".

There is a link to "View posts since last visit" and "View your posts".

A table titled "Demo Forum Index" shows the following data:

Forum	Topics	Posts	Last Post
Test category 1			
Test Forum 1 This is just a test forum.	1	1	21 Oct 2000 12:01 am Admin →

Below the table, there is a link "Mark all forums read" and a note "All times are GMT".

A section titled "Who is Online" shows the following statistics:

- Our users have posted a total of **1** article
- We have **1** registered user
- The newest registered user is [Admin](#)
- In total there is **1** user online :: 1 Registered, 0 Hidden and 0 Guests [[Administrator](#)]
- [[Moderator](#)]
- Most users ever online was **1** on 05 May 2006 06:31 pm
- Registered Users: [Admin](#)

A note states: "This data is based on users active over the past five minutes".

At the bottom, there are three status indicators: [New posts](#), [No new posts](#), and [Forum is locked](#).

Practical problems

- Name clashes ➡ no good solution
- Database tables ➡ use a prefix
- Syncing userdata ➡ depends ...
- Login ➡ tricky, but doable
- Security models ➡ leave as is
- CSS and JavaScript conflicts ➡ doable

The Real World Dilemma

In an ideal world ...

- all code would be object oriented
- there would be namespaces

... and hence no name clashes



The Real World Dilemma

However, ...

- a lot of real-world code is **not** object oriented
- PHP does **not** have namespaces

... hence you will have to deal with name clashes



Function Prefixes

always there:

- COM_
- CUSTOM_
- DB_
- MBYTE_
- PLG_
- SEC_
- SESS_

may also be there:

- ADMIN_
- CMT_
- PNB_
- STORY_
- SYND_
- TRB_
- USER_

What to do in case of integration problems?

- Talk to the developers
 - **both parties!**
- If nothing else helps:
Fork it!



To get you started

- Plugin Developer's Guide
 - ➡ Universal Plugin (skeleton code)
- Look at the existing plugins ...

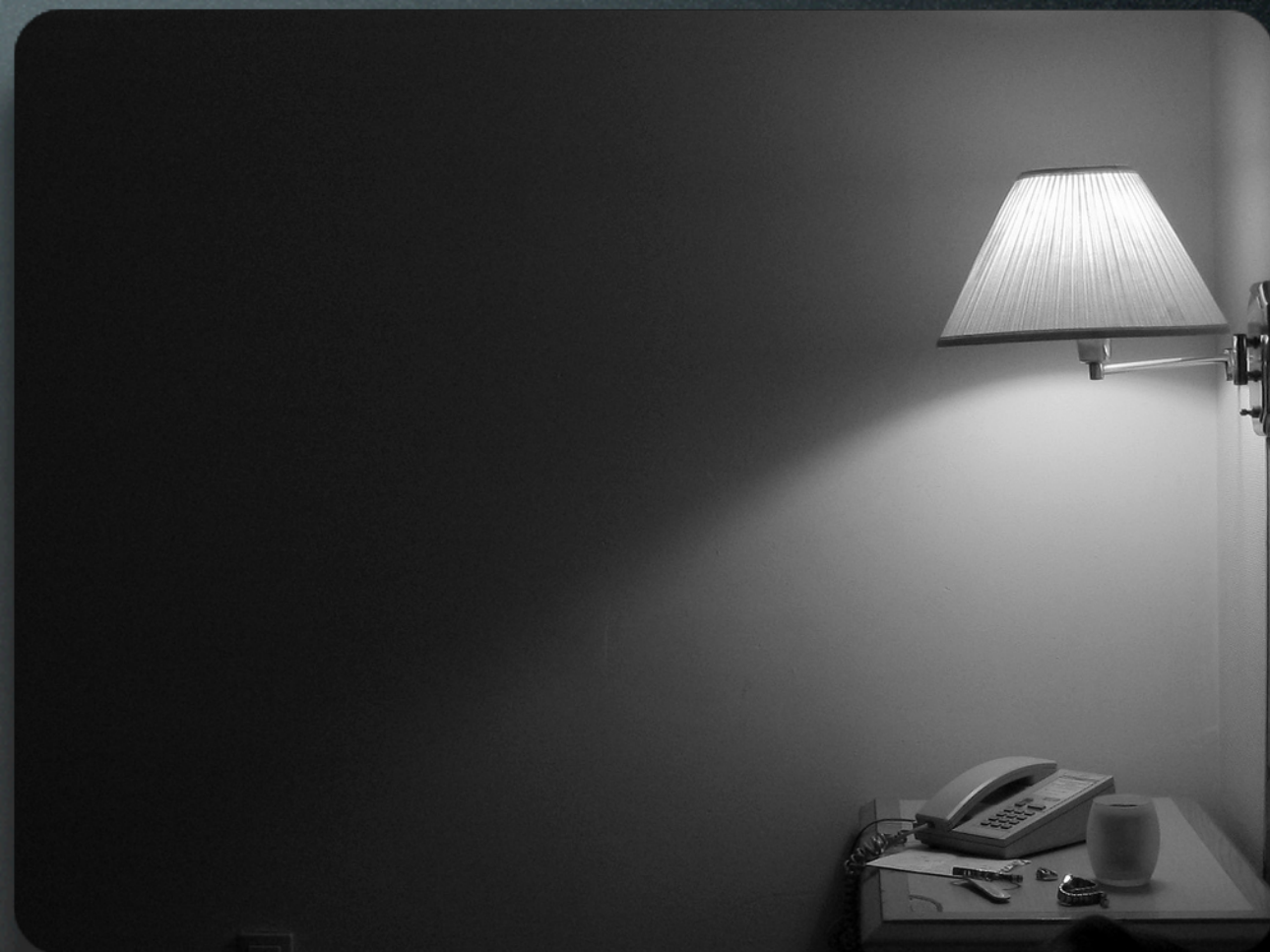


Resources

- wiki.geeklog.net
- mailing lists:
 - [geeklog-devtalk](#)
 - [geeklog-modules](#)
- www.geeklog.net



Problems?
Talk to us!



Thanks

- Sebastian Celis
- Andy Maloney
- Euan McKay



Photos: flickr.com



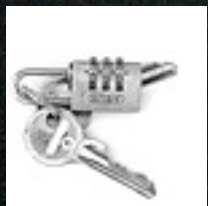
coba



Giant Ginkgo



fallsroad



massenpunkt



besides

(c) m.wickenkamp

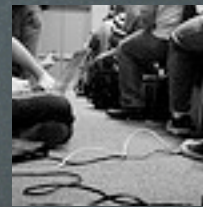


jmsmytaste

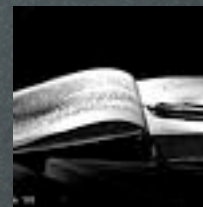


elfis gallery

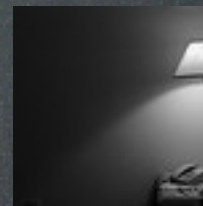
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sfegette



digital-blink



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manuki