



The PHP Company

Bring your intranet to the IBM i With Drupal and Zend Server

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Audience

- **Manager looking for Intranet/place to put stuff**
- **Developers looking to leverage PHP**
- **Excess CPW**
- **Avoid buying more Intel servers**
- **Executive looking for new home base for apps**

Agenda

- Zend Server
- MySQL on IBM i
- Review of Drupal
- Drupal Installation
- Drupal in action
- Implement cron (batch) scripts with Zend Server Job Queue
- Wrap-up

Questions?

- If you have a question you can

- ▶ Type in the Chat panel

- Follow us!



- ▶ <http://bit.ly/cjueZg> (Zend Technologies or search for Zend)



- ▶ <http://twitter.com/zend>

Resources

- Recorded Webinars

- ▶ <http://www.zend.com/en/resources/webinars/i5-os>

- Zend Server for IBM i main page, link to downloads

- ▶ <http://www.zend.com/en/products/server/zend-server-ibm-i>

- Zend Server manual:

- ▶ PDF: <http://www.zend.com/topics/Zend-Server-5-for-IBMi-Reference-Manual.pdf>

- ▶ Online: http://files.zend.com/help/Zend-Server-5/zend-server.htm#installation_guide.htm

On the road with Zend



- Techfest 2010 - Dallas, TX July 30, 2010
‣ <http://www.zend.com/en/company/news/event/dallas-techfest>
- COMMON - San Antonio, TX October 4-6, 2010
‣ www.common.org
- ZendCon 2010 - Santa Clara, CA November 1-4, 2010
‣ <http://www.zendcon.com/>

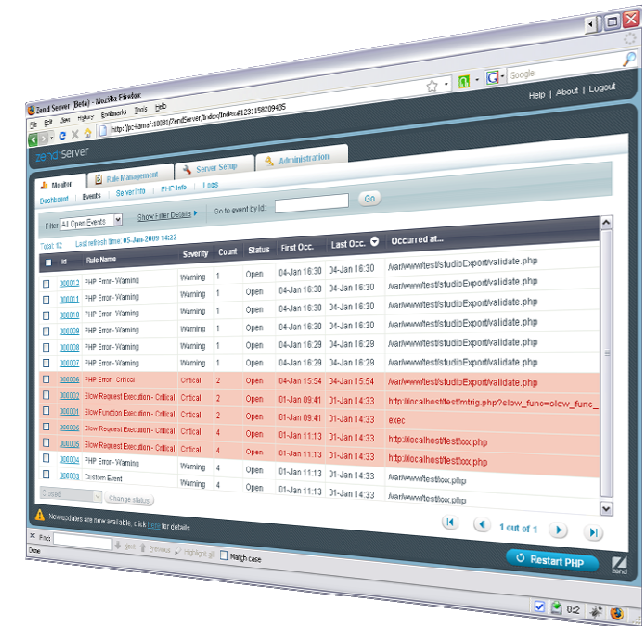
Drupal, Zend Server and IBM i

www.zend.com

Technical overview

What Is Zend Server?

- Production quality PHP stack
 - ▶ PHP, ZF, DB connectivity, debugging extension, and more
- Two Editions - Free “Community Edition” provided by IBM & Full commercial edition
 - ▶ Both are production ready
- Application monitoring and diagnostics (integrated with Zend Studio)
- Multi-level performance enhancement capabilities
- Software updates and security hot fixes
- Easy and quick installation
- Zend Framework Integration



Zend Server for IBM i

- Next generation of PHP stack for IBM i
- Best of both Zend Core and Zend Platform
- Single Licensed Program Installation
- Two products
 - ▶ Zend Server for IBM i Community Edition
 - Available at no charge per IBM partnership
 - ▶ Zend Server for IBM i
 - Subscription available from Zend
 - High value extra features
 - Higher Support SLAs

Drupal, Zend Server and IBM i

www.zend.com

MySQL

Why run MySQL when I have DB2?

- Access to thousands of Open Source Apps
- Easy to use Database
- Open the door to new report options
 - ▶ Zend Server simultaneous connections to:
 - DB2
 - MySQL
 - Microsoft SQL Server
 - PHP Toolkit (RPG & COBOL programs & more)
- **DB2 Storage Engine**
 - ▶ Application thinks it's writing to MySQL
 - ▶ Data store resides in DB2
 - ▶ RPG applications can now access data!



Where do I get it?

- **Bundled in Zend Server for IBM i**
 - ▶ Convenient installation
 - ▶ Use QSECOFR!
- **Also available at MySQL website**



[Generally Available \(GA\) Products](#)
[Development Releases](#)

MySQL Community Server 5.1.48

Tablet Edition

IBM i5/OS (PowerPC, 32-bit), Compressed TAR Archive	5.1.48	109.8M	Download
MySQL 5.1.48-504 Source (32-bit) .gz			
IBM i5/OS (PowerPC), Compressed TAR Archive	5.1.48	111.5M	Download
MySQL 5.1.48-504 Source (64-bit) .gz			
IBM i5/OS (PowerPC, 32-bit), Base File (SAVF)	5.1.48	155.4M	Download
MySQL 5.1.48-504 Source (32-bit) .savf			
IBM i5/OS (PowerPC), Base File (SAVF)	5.1.48	156.1M	Download
MySQL 5.1.48-504 Source (64-bit) .savf			

Drupal, Zend Server and IBM i

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Drupal

Drupal is popular



Statistics

- Nearly 1/3rd of the Internet is running PHP
- About 1% of all internet websites are running Drupal
- Drupal is second only to WordPress as a content management site (backendbattles.com)

History of Drupal (Dutch for water droplet)



- Dries Buytaert PHD dissertation starts Drupal by accident
- 1999: Developed a message board while studying LAN tech
- 2000: Received a lot of interest from folks
- 2001: Turned it loose as open source Drupal
- 2007: Forms Acquia
- 2008: Dries defends his dissertation
- 2009: Acquia helps launch Whitehouse.gov
- Today: Current project lead



Drupal itself

- **Current version 6.17**
 - ▶ Available at drupal.org
 - ▶ Loads of features like: blogs, forums, RSS, Generic content, etc.
 - ▶ Key enhancements: Simplified installer, Language support, Update status and more
- **Next version 7**
 - ▶ (no ETA, as of yet...)
 - ▶ Heavy focus on usability
 - ▶ Improving platform for developers
 - ▶ Some consider Drupal 7 another framework



DrupalGardens

- Runs on Drupal 7
- Hosted solution with three pricing tiers starting at free!
- No need to buy/run server
- Drupal in the cloud!
- Currently in beta
- Should be available around the same time as Drupal 7



Drupal, Zend Server and IBM i


www.zend.com

Drupal Installation

Drupal Installation Steps

- Download drupal
- Move to the IFS
- Untar
- Create database
- Settings.php
- Run install script
- Have fun!

Download Drupal - Login first



The screenshot shows the Drupal.org website in a web browser. The browser's address bar displays 'http://drupal.org/'. The website's header features the Drupal logo and a navigation menu with links to Documentation, Download, Support, Forum, Contribute, and Contact. A search bar is located on the right side of the header.

The main content area is divided into several sections:

- DRUPAL CON CPH**: A banner for the Drupal Conference in Copenhagen, held from August 23rd to 27th.
- Drupal.org is the official website of Drupal**: A section describing Drupal as an open source content management platform, equipped with a powerful blend of features. It lists links for About Drupal, Features, Hosting, Events, Screenshots, Demo, Paid services, and Jobs.
- Download**: A section titled 'Latest release:' showing 'Drupal 6.17' and 'Drupal 5.22'. It also lists 'Contributions:' with links for Modules, Themes, and Translations.
- User login**: A form with fields for 'Username: *' and 'Password: *', a 'Log in' button, and links for 'Create new account' and 'Request new password'.
- Contributor links**: A section at the bottom right.

A red arrow points to the 'Username: *' field in the 'User login' form.

Drupal 6.17 released
Gábor Hojtsy - June 2, 2010 - 18:11
News and announcements · Drupal 6.x · Drupal News

Drupal 6.17, a maintenance release fixing issues reported through the bug tracking system, is now available for download. There are no security fixes in this release. **Upgrading** your existing Drupal 6 sites is recommended. For more information about the Drupal 6.x release series, consult the **Drupal 6.0 release announcement**.

Highlights of changes in this release include improvements of session cookie handling, better processing of big XML-RPC payloads, improved PostgreSQL compatibility, better PHP 5.3 and PHP 4 compatibility, improved Japanese support in search module, better browser compatibility of CSS and JS aggregation and improved logging for login failures. An incompatibility of Drupal 6.16's new lock subsystem with some contributed modules was also resolved. In total there were about 55 patches committed to improve Drupal 6.

[Download Drupal 6.17](#)

Download Drupal 6...

The screenshot shows the Drupal.org project page. The browser tabs include 'Administer | CUPER1.ZEND...', 'Drupal Gardens | Get a Fre...', and 'Drupal | drupal.org'. The address bar shows 'http://drupal.org/project/drupal'. The page layout includes a left sidebar with bug reports and recent issues, a main content area with a list of issues, download and release tables, and a right sidebar with navigation links.

Bug reports
32633 total
4262 open, 18461 total
Subscribe via e-mail
Issue statistics
Oldest open issue: 28 Feb 02

Recent issues

- Problem with update of mixed case module names
- Adds #title and #title_display to the weight columns of all tabledrag elements in core
- upgrade drupal 7 alpha 5 to alpha 6 failed
- Forum icons not accessible to screen-reader users
- Shortcut "Edit shortcuts" link has insufficient color contrast ratio

Issues

- #675046: Make sure all hooks in D7 have documentation
- #594192: Do not release Drupal 7 until api.drupal.org supports classes
- #653068: Update documentation is incomplete
- #755790: Review core for accessibility before release

Downloads

Version	Downloads	Date	Links
6.17	Download (1.04 MB)	2010-Jun-02	Notes
5.22	Download (750.15 KB)	2010-Mar-03	Notes

Recommended releases

Version	Downloads	Date	Links
6.17	Download (1.04 MB)	2010-Jun-02	Notes
5.22	Download (750.15 KB)	2010-Mar-03	Notes

Other releases

Version	Downloads	Date	Links
7.0-alpha6	Download (2.34 MB)	2010-Jul-08	Notes

Development releases

Version	Downloads	Date	Links
7.x-dev	Download (2.35 MB)	2010-Jul-19	Notes
6.x-dev	Download (1.04 MB)	2010-Jul-10	Notes
5.x-dev	Download (750.21 KB)	2010-Jul-10	Notes

[View all releases](#)

Resources

- [Read license](#)
- [Try out a demonstration](#)

Development

- [View pending patches](#)
- [Browse the CVS repository](#)

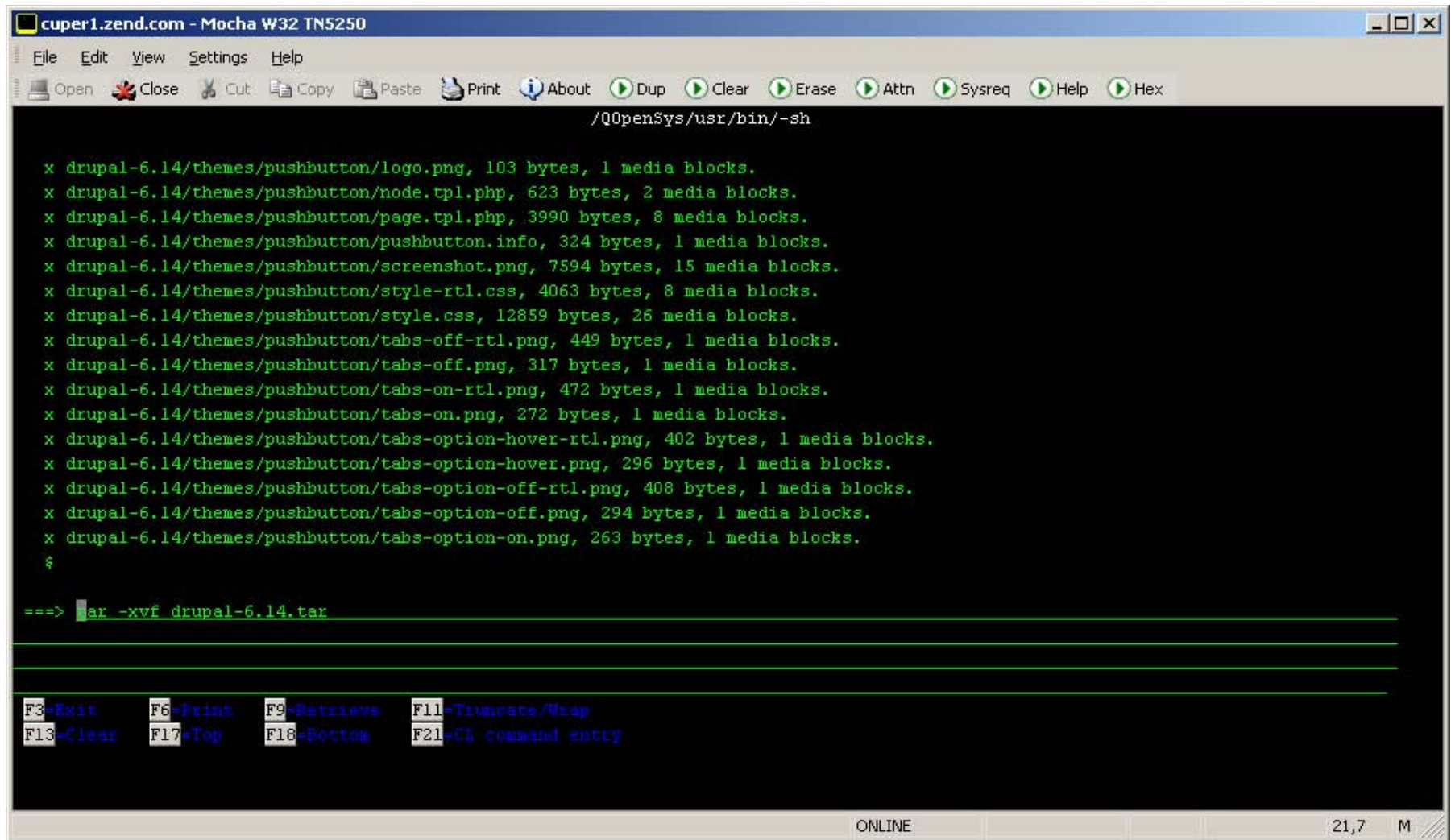
Other bookmarks

- [Drupal Core](#)
- [Contributions](#)
- [Mailing list archives](#)
- [Drupal.org webmasters](#)
- [Drupal.org server administrators](#)
- [Drupal.org CVS applications](#)
- [Web links](#)
 - [Planet Drupal](#)
 - [Drupal talk](#)
 - [Drupal dojo](#)

Unpack the file

- FTP file to the IFS of the IBM i
- Start QP2TERM to get PASE command shell
- Issue the standard TAR (Tape Archive) command
 - ▶ `tar -xvf drupal-6.14.tar`
- Command details: -xvf means...
 - ▶ x = Extract, v = verbose, f = Include file name in command
- Files are unpacked to a directory called drupal-6.14
- Tar command is part of LP's required for Zend Server!

Unpack output...



The screenshot shows a terminal window titled "cuper1.zend.com - Mocha W32 TN5250". The terminal displays the output of a tar command, listing files and their sizes and media blocks. The files listed are:

- x drupal-6.14/themes/pushbutton/logo.png, 103 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/node.tpl.php, 623 bytes, 2 media blocks.
- x drupal-6.14/themes/pushbutton/page.tpl.php, 3990 bytes, 8 media blocks.
- x drupal-6.14/themes/pushbutton/pushbutton.info, 324 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/screenshot.png, 7594 bytes, 15 media blocks.
- x drupal-6.14/themes/pushbutton/style-rtl.css, 4063 bytes, 8 media blocks.
- x drupal-6.14/themes/pushbutton/style.css, 12859 bytes, 26 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-off-rtl.png, 449 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-off.png, 317 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-on-rtl.png, 472 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-on.png, 272 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-option-hover-rtl.png, 402 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-option-hover.png, 296 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-option-off-rtl.png, 408 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-option-off.png, 294 bytes, 1 media blocks.
- x drupal-6.14/themes/pushbutton/tabs-option-on.png, 263 bytes, 1 media blocks.

The prompt is \$, and the command entered is `tar -xvf drupal-6.14.tar`. The terminal also shows a list of function key shortcuts at the bottom left:

- F3=Exit, F6=Print, F9=Retrieve, F11=Truncate/Unap
- F13=Clear, F17=Top, F18=Bottom, F21=CL command entry

The status bar at the bottom right shows "ONLINE", "21,7", and "M".

Copy the settings file and change security

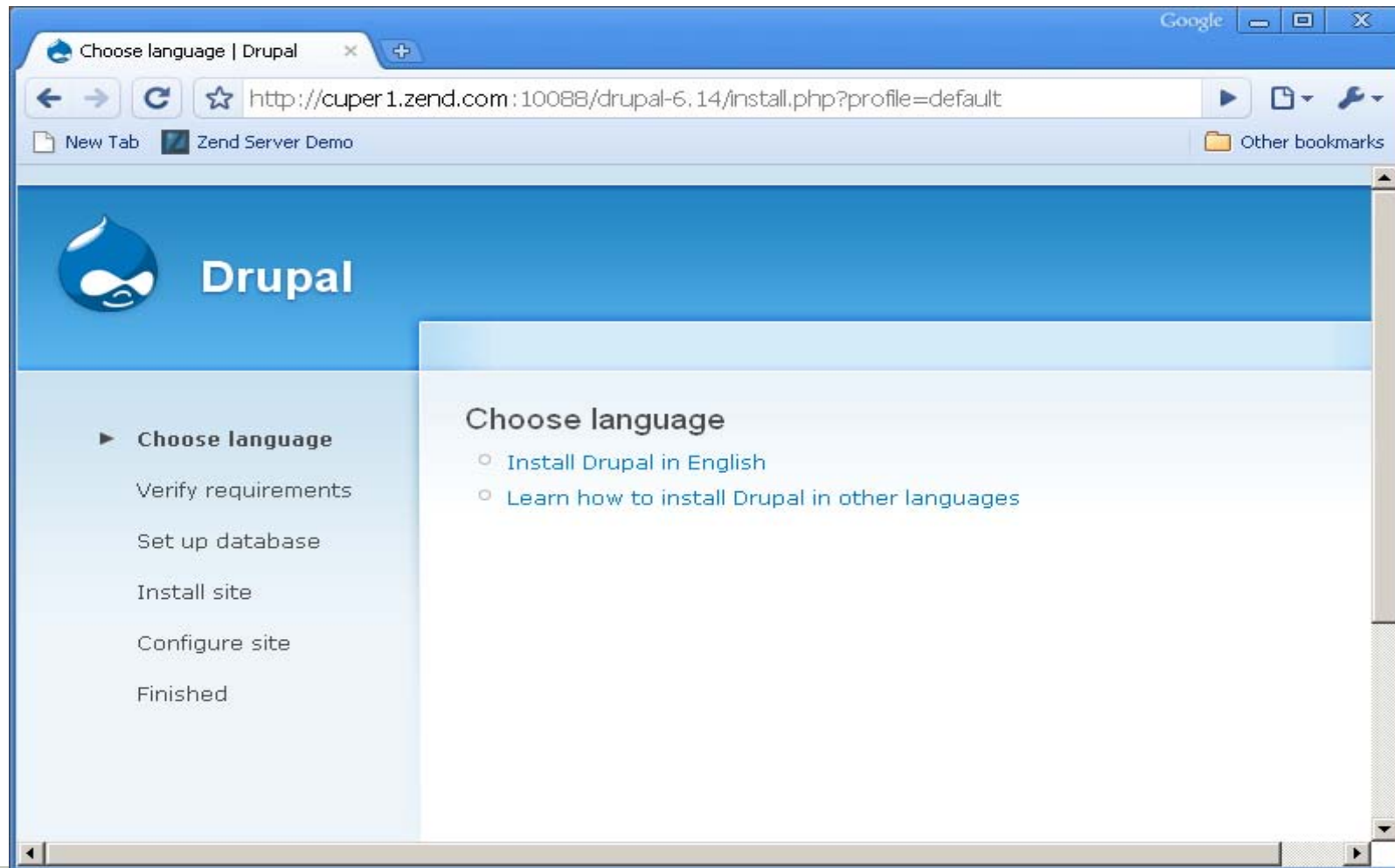
- `cp default.settings.php settings.php`
- This makes a backup so you can restart if necessary
- Navigate to the default directory and change the security
- `chmod a+w settings.php`
- Remember where this file is as you will go back & reset

Create database in MySQL

- **Navigate to the MySQL binaries directory**
 - ▶ `cd /usr/local/mysql/bin`
- **Issue command to start MySQL command line**
 - ▶ `mysql -u root`
- **Create profile information for drupal (i.e. drupalcon)**
- **Create the database**
 - ▶ `create database drupalbase1;`
- **Give drupalcon authority to the database**
 - ▶ `grant select, insert, update, delete, create, drop, index, alter on drupalbase1.* to 'drupalcon'@'localhost';`
 - ▶ `flush privileges;`

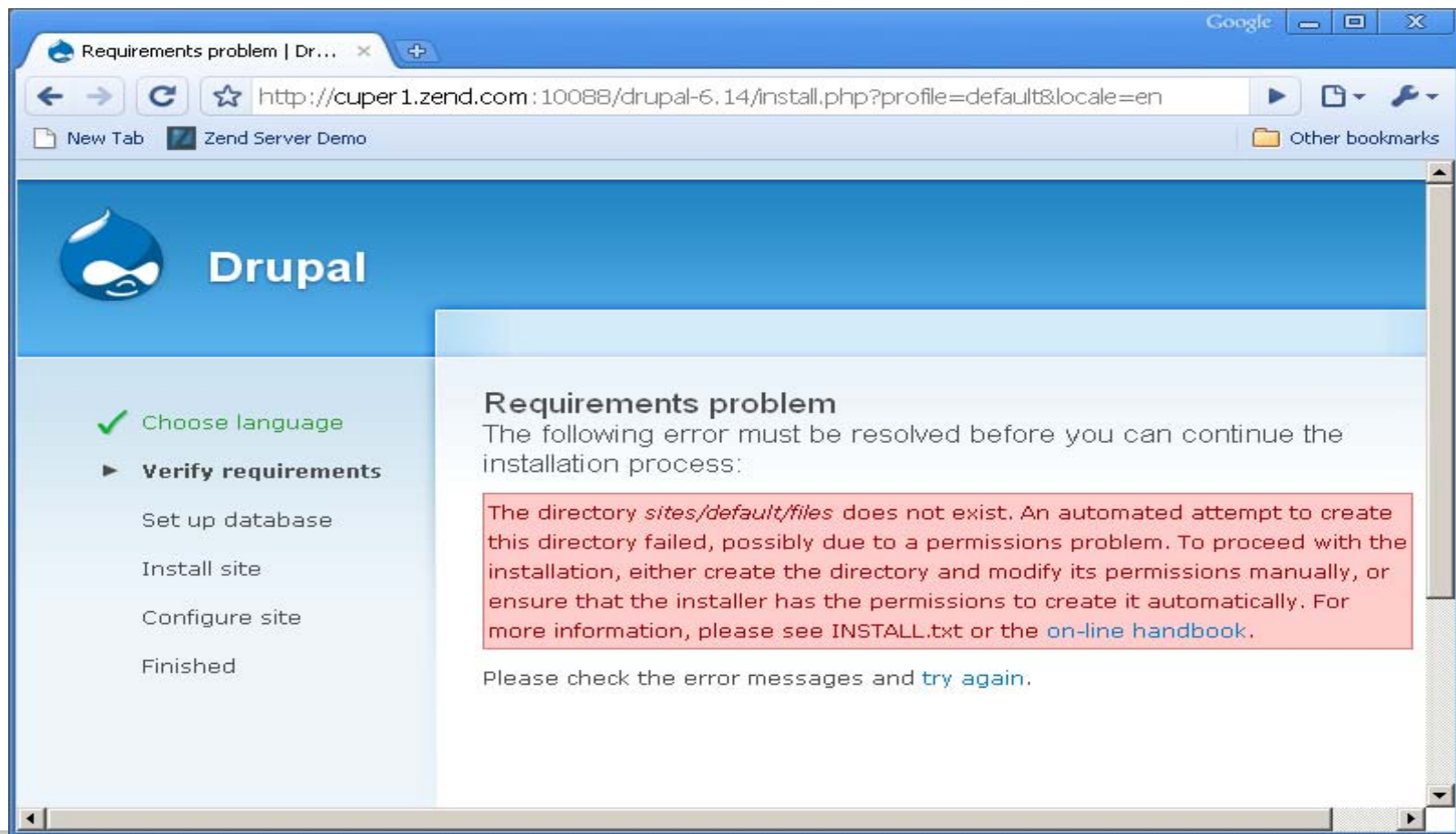
Install Drupal

- <http://myssystemname:10088/drupal-6.14>



Attempt to write to document root

- CHGAUT OBJ('/www/zendsvr/htdocs/drupal-6.14')
USER(QTMHHTTP) DTAAUT(*RWX) SUBTREE(*ALL)



Setup database

The screenshot shows the Drupal installation page for database configuration. The browser address bar shows the URL: `http://cuper1.zend.com:10088/drupal-6.14/install.php?profile=default&locale=en`. The page title is "Database configuration | D...". The Drupal logo is in the top left. A sidebar on the left shows the installation progress: "Choose language" (checked), "Verify requirements" (checked), and "Set up database" (active). Under "Set up database", the steps are "Install site", "Configure site", and "Finished". The main content area is titled "Database configuration" and contains a section for "Basic options". It instructs the user to "To set up your Drupal database, enter the following information." The form includes: "Database type:" with radio buttons for "mysql" (selected) and "pgsql"; "Database name:" with a text field containing "drupalbase1"; "Database username:" with a text field containing "drupalcon"; and "Database password:" with a password field containing six dots. Below these fields is a link for "Advanced options". At the bottom is a "Save and continue" button. Red arrows with labels point to the "Database type:" label, the "Database name:" field, the "Database username:" field, the "Database password:" field, and the "Save and continue" button. The labels are "Name", "User", "Password", and "Save & Cont" respectively.

Database configuration

Basic options

To set up your Drupal database, enter the following information.

Database type: *

☒ mysql
☐ pgsql

The type of database your Drupal data will be stored in.

Database name: *

drupalbase1

The name of the database your Drupal data will be stored in. The name must be unique on your server before Drupal can be installed.

Database username: *

drupalcon

Database password:

.....

[Advanced options](#)

[Save and continue](#)

Configure

Configure site | Drupal

http://cuper1.zend.com:10088/drupal-6.14/install.php?locale=en&profile=default

New Tab Zend Server Demo Other bookmarks

Drupal

- ✓ Choose language
- ✓ Verify requirements
- ✓ Set up database
- ✓ Install site
- **Configure site**
 - Finished

Configure site

All necessary changes to `./sites/default` and `./sites/default/settings.php` have been made, so you should remove write permissions to them now in order to avoid security risks. If you are unsure how to do so, please consult the [on-line handbook](#).

To configure your website, please provide the following information.

Site information

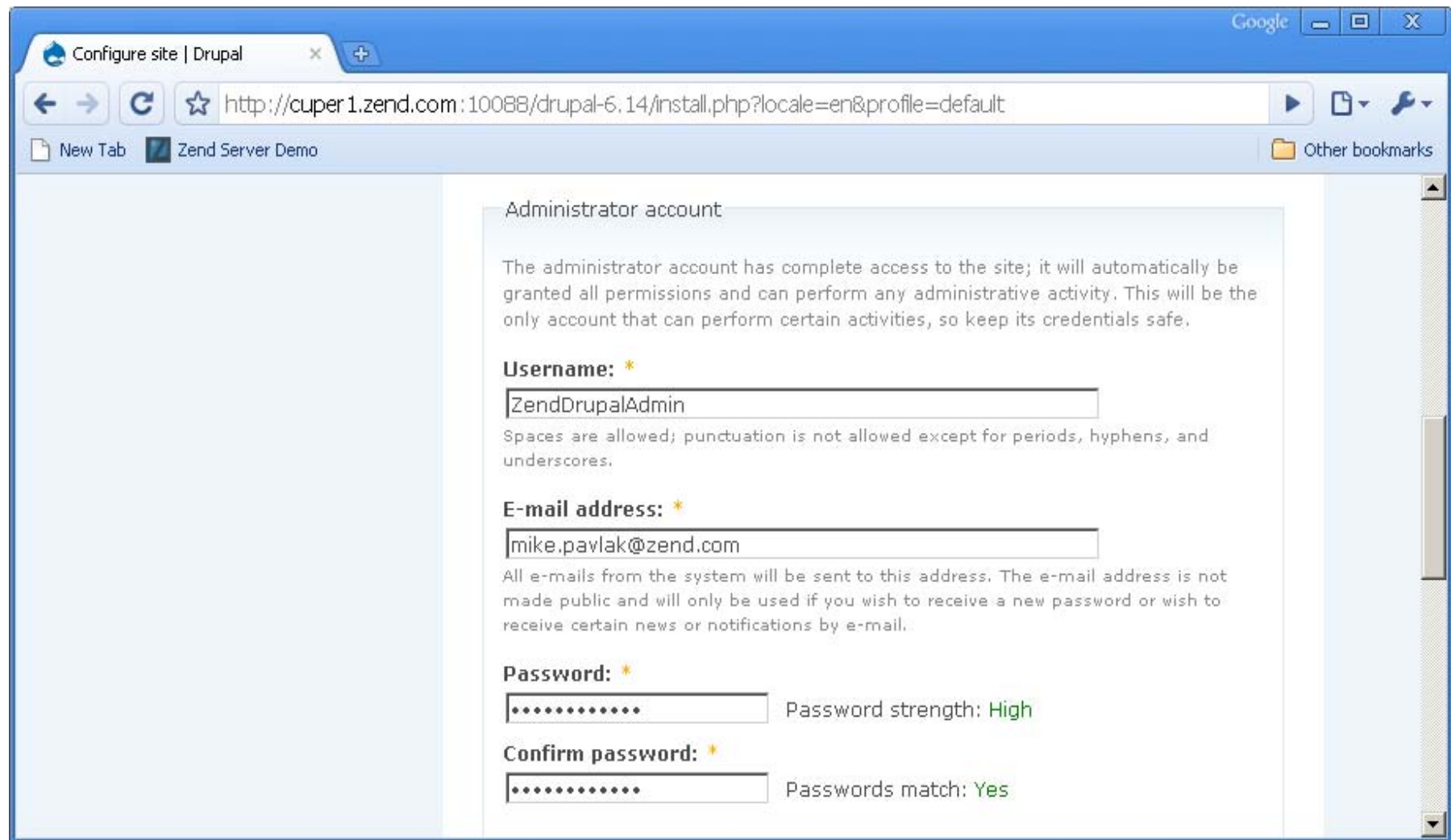
Site name: *

CUPER1.ZEND.COM

Site e-mail address: *

The *From* address in automated e-mails sent during registration and new password requests, and other notifications. (Use an address ending in your site's domain to help prevent this e-mail being flagged as spam.)

Setup the admin account



The screenshot shows a web browser window with the title "Configure site | Drupal". The address bar shows the URL: `http://cuper1.zend.com:10088/drupal-6.14/install.php?locale=en&profile=default`. The browser tabs include "New Tab" and "Zend Server Demo".

The main content area is titled "Administrator account" and contains the following text:

The administrator account has complete access to the site; it will automatically be granted all permissions and can perform any administrative activity. This will be the only account that can perform certain activities, so keep its credentials safe.

Username: *

Spaces are allowed; punctuation is not allowed except for periods, hyphens, and underscores.

E-mail address: *

All e-mails from the system will be sent to this address. The e-mail address is not made public and will only be used if you wish to receive a new password or wish to receive certain news or notifications by e-mail.

Password: *

Password strength: **High**

Confirm password: *

Passwords match: **Yes**

Set time zone & updates

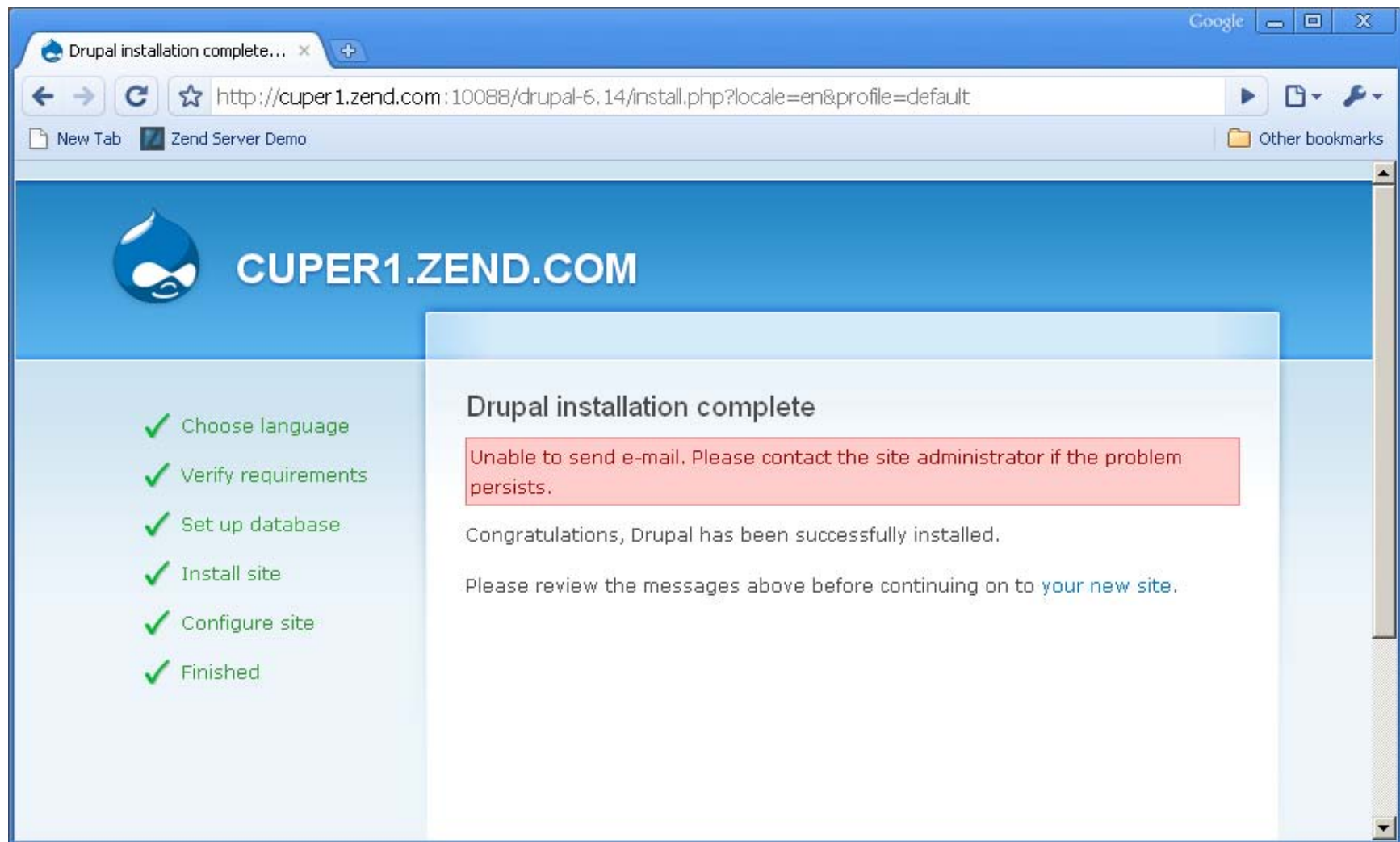
The screenshot shows the 'Configure site | Drupal' page in a web browser. The address bar shows the URL: `http://cuper1.zend.com:10088/drupal-6.14/install.php?locale=en&profile=default`. The page title is 'Configure site | Drupal'. The browser's address bar also shows 'New Tab' and 'Zend Server Demo'.

The main content area is titled 'Server settings' and contains the following sections:

- Default time zone:** A dropdown menu is set to 'Wednesday, January 20, 2010 - 10:11 -0600'. Below it, a note states: 'By default, dates in this site will be displayed in the chosen time zone.'
- Clean URLs:** Two radio buttons are present: 'Disabled' and 'Enabled'. The 'Enabled' option is selected. Below the buttons, a note states: 'This option makes Drupal emit "clean" URLs (i.e. without ?q= in the URL).' A green message box below this section reads: 'Your server has been successfully tested to support this feature.'
- Update notifications:** A checkbox labeled 'Check for updates automatically' is checked. Below it, a note states: 'With this option enabled, Drupal will notify you when new releases are available. This will significantly enhance your site's security and is **highly recommended**. This requires your site to periodically send anonymous information on its installed components to drupal.org. For more information please see the [update notification information](#).'

At the bottom of the form is a 'Save and continue' button.

Once completed, see summary screen...



Drupal, Zend Server and IBM i

www.zend.com

Drupal Tour

Tour key features of Drupal

- Module selection
- Theme selection
- Create page of content

Drupal, Zend Server and IBM i

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Zend Server Job Queue and Cron

Drupal updates via Cron job

- **What is cron**
 - ▶ Unix term for scheduled job (sound familiar?)
- **Why periodically run the cron**
 - ▶ Search module updates the index
 - ▶ Aggregator module retrieval of feeds
 - ▶ Ping module notification of other sites
 - ▶ System module's routine maintenance like pruning of logs
- **Check Drupal documentation for all updates in cron**

Drupal updates via Cron job

- How often do you run?
 - ▶ It depends
 - ▶ If content & activity is dynamic, run cron more often

Set up cron

[View](#)[Revisions](#)

Last modified: April 22, 2010 - 16:25

Configuring **cron** is an extremely important task in your Drupal website setup. Search module's indexing of your website's content, aggregator module's retrieval of feeds, ping module's notification of other sites of updates, and system module's routine maintenance tasks, such as pruning of logs, all depend a properly configured cron job.

What is a cron job?

Many Drupal modules have tasks that have to take place from time to time. Think of cron as the tolling of a bell, letting Drupal know that it should perform the appropriate tasks.

The actual "cron job" is a time-triggered action that is usually (and most efficiently) performed by your website's hosting server, but can also be configured by a remote service or even from your own desktop.

For your Drupal site, what actually happens is that the cron job triggers an invisible visit to the site's cron.php file (<http://www.example.com/cron.php>) which, in turn, executes tasks on behalf of installed modules.

- ▶ **Configuring cron jobs**
 - [Configuring cron jobs on DreamHost](#)
 - [Configuring cron jobs on Media Temple Grid Servers \(gs\)](#)
 - [Configuring cron jobs on Windows](#)

Why would I schedule a job?

- Many Open Source applications have updates
- Updates are smartly distributed via a PHP script call
- Let's look at Drupal
- Cron job - batch based update, needs no interactive
- Check Drupal documentation for all updates

Drupal cron Documentation

The screenshot shows a web browser window with the URL <http://drupal.org/node/158922>. The page is the Drupal.org documentation for "Running cron manually". The header includes the Drupal logo and navigation links: Documentation, Download, Support, Forum, Contribute, and Contact. A search bar is also present. The breadcrumb trail is: Home > Installation guide > Basic installation > After Installation > Set up cron.

Installation guide

- System requirements
- Basic installation
 - Quick install for experts
 - Before you begin
 - Step 1: Download and unzip Drupal
 - Step 2: Create the database
 - Step 3: settings.php
 - Step 4: Run the installation script
- After Installation
 - Set up cron
 - Configuring cron jobs
 - Configuring cron jobs on DreamHost
 - Configuring cron jobs on Media Temple Grid Servers (gs)
 - Configuring cron jobs on Windows

Running cron manually

Last modified: January 4, 2010 - 21:14 Drupal 5.x · Drupal 6.x

To run a cron job manually, simply visit your own site's url at <http://example.com/cron.php> with your web browser, and cron will run and complete in the background. You'll be left with a blank white page, which is normal. Use the browser's back button to return to the previous page and continue where you left off. It doesn't matter how long you wait while you're seeing the blank white page, and returning to the previous page at any time won't stop the cron process from running.

Core provides a convenience link for running cron manually too. Look at the Status page's link: `/admin/logs/status/run-cron?destination=admin%2Flogs%2Fstatus`. You can paste that into your own site's address bar any time you want to run a cron.

In addition, if you have the [update_status.module](#) installed, and you should since it's simply glorious, you'll be presented with a custom link on your `admin/logs/updates` page.

For Drupal 6.x, see in your site: *Administer > Reports > Status report > Cron maintenance tasks > Run cron manually*.

[Simple wget multisite cron, up](#) [Setting up cron on Hostmonster through the cPanel interface >](#)

[Login or register](#) to post comments

User login

Username: *

Password: *

- [Create new account](#)
- [Request new password](#)

Contributor links

- Community initiatives
- Queues
 - My issues
 - 471 Pending bugs (D7)
 - 79 Critical issues (D7)
 - 1519 Patch queue (D7)
 - 404 Patches to review (D7)
 - Performance issues (D7)
 - Usability issues (D7)
 - Fields in Core issues

Zend Server Job Scheduler

- Can take a URL
- Also application and description
- Set a particular date/time
 - ▶ For a single event
 - ▶ For a recurring event
- Very powerful schedule process.

Zend Server Job Scheduler

- To see job scheduler
 - ▶ Navigate to Zend Server admin interface
 - ▶ Rule Management → Recurring jobs



The screenshot shows the Zend Server Admin interface. At the top, there's a header with the 'zend server' logo and links for 'Help | About | Logout'. Below the header is a navigation bar with four tabs: 'Monitor', 'Rule Management', 'Server Setup', and 'Administration'. Under 'Rule Management', there are sub-tabs: 'Monitoring', 'Caching', and 'Recurring Jobs'. The 'Recurring Jobs' tab is active. Below the sub-tabs, there's a 'Filter' input field and a 'New Recurring Job' button. A table lists the recurring jobs. The table has columns: 'ID', 'Job Name', 'URL', 'Last Run', 'Next Run', and 'Actions'. There is one job listed: '000003', 'CRON Update', 'http://cuper1.zend.com:10088/drupal-6.14/cron.php', '24-May 14:40', '25-May 14:40', and an 'History' link.

ID	Job Name	URL	Last Run	Next Run	Actions
000003	CRON Update	http://cuper1.zend.com:10088/drupal-6.14/cron.php	24-May 14:40	25-May 14:40	History

Job Details

zend server

Monitor

Rule Management

Server Setup

Administration

Monitoring | Caching | Recurring Jobs

Update Rule

Cancel

Edit Scheduling Rule

URL:

Name:

Application:

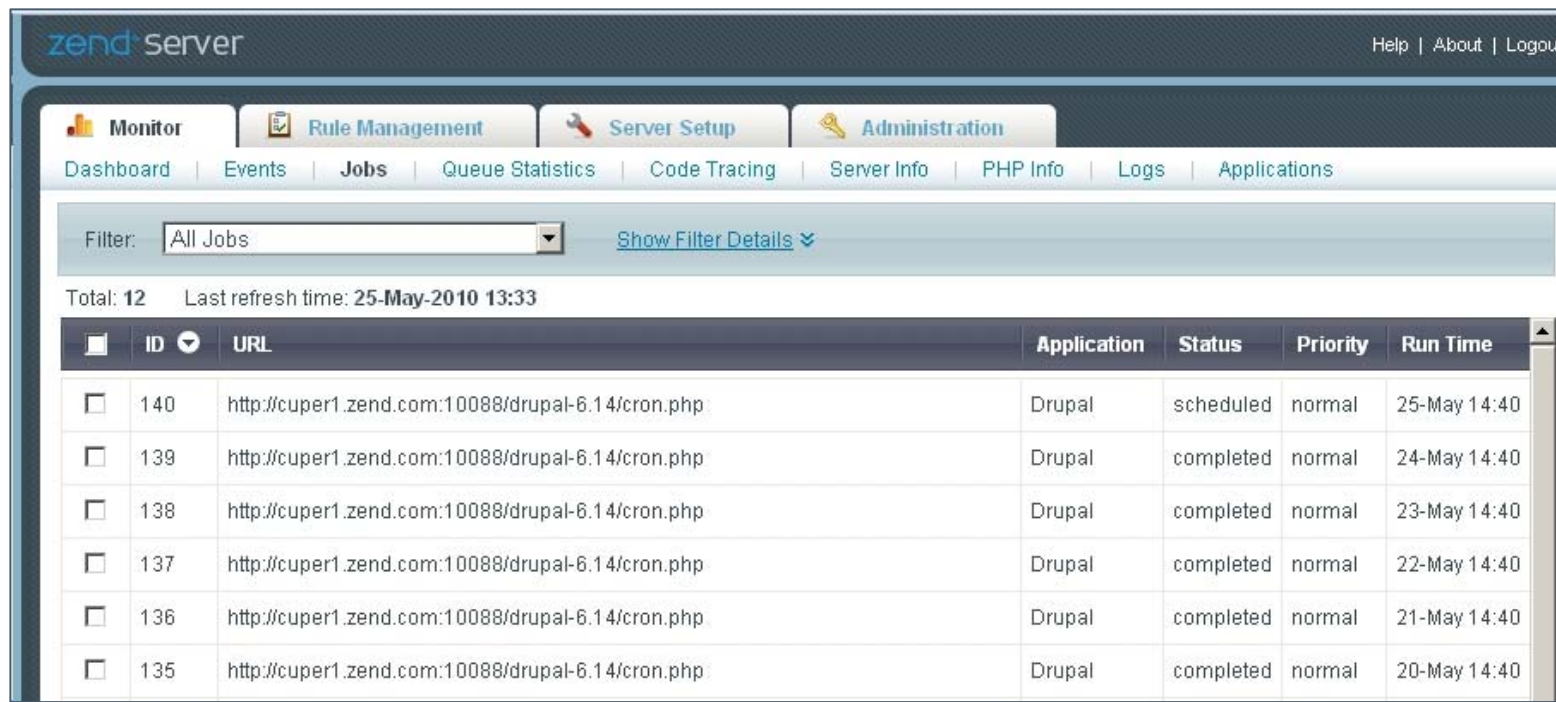
Schedule

Execute Job:

at

How did the job do?

- Monitoring system will track batch jobs
- Can review output
- Navigate to Monitor → Jobs



The screenshot shows the Zend Server web interface. At the top, there's a navigation bar with 'zend server' logo and links for 'Help | About | Logout'. Below this is a secondary navigation bar with tabs: 'Monitor' (selected), 'Rule Management', 'Server Setup', and 'Administration'. Under the 'Monitor' tab, there's a sub-navigation bar with links: 'Dashboard', 'Events', 'Jobs' (selected), 'Queue Statistics', 'Code Tracing', 'Server Info', 'PHP Info', 'Logs', and 'Applications'. The main content area shows a 'Filter: All Jobs' dropdown and a 'Show Filter Details' link. Below this, it says 'Total: 12' and 'Last refresh time: 25-May-2010 13:33'. A table lists the jobs with columns: ID, URL, Application, Status, Priority, and Run Time. The table contains 6 rows of data, showing jobs for 'Drupal' with various statuses like 'scheduled' and 'completed'.

ID	URL	Application	Status	Priority	Run Time
140	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	scheduled	normal	25-May 14:40
139	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	completed	normal	24-May 14:40
138	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	completed	normal	23-May 14:40
137	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	completed	normal	22-May 14:40
136	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	completed	normal	21-May 14:40
135	http://cuper1.zend.com:10088/drupal-6.14/cron.php	Drupal	completed	normal	20-May 14:40

But wait, there's more!

- **Page caching**

- ▶ Not too exciting to most IBM i shops, unless...
- ▶ Very exciting when working with content management
- ▶ Built in to Zend Server
- ▶ Works a lot like caching on disk controllers.
- ▶ Save round trip to disk for static content and pages
- ▶ The less your content changes and the more your users access pages, the more you NEED page caching
- ▶ Cache one page or all

Thank you & Q&A

- If you have a question you can

- ▶ Type in the Q&A panel
- ▶ Tweet #zendwebinar

- Follow us!



▶ <http://bit.ly/cjueZg> (Zend Technologies or search for Zend)



▶ <http://twitter.com/zend>

Resources

- **Drupal**
 - ▶ <http://drupal.org/>
 - Documentation, code, downloads, modules, etc...
- **Zend Server for IBM i main page, link to downloads**
 - ▶ <http://www.zend.com/en/products/server/zend-server-ibm-i>
- **My blog: Article on Samples in Zend Server!**
 - ▶ <http://mikepavlak.blogspot.com/>

Q&A

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