



# Intranet My i

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# Audience

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- **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**
- **Do you want to learn how to install an open source application on IBM i?**

# Agenda

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- **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**

# Intranet My i

MariaDB

# MySQL

- MySQL discontinued distributions.
- Zend and IBM have partnered to bring something back!
- Get ready for...



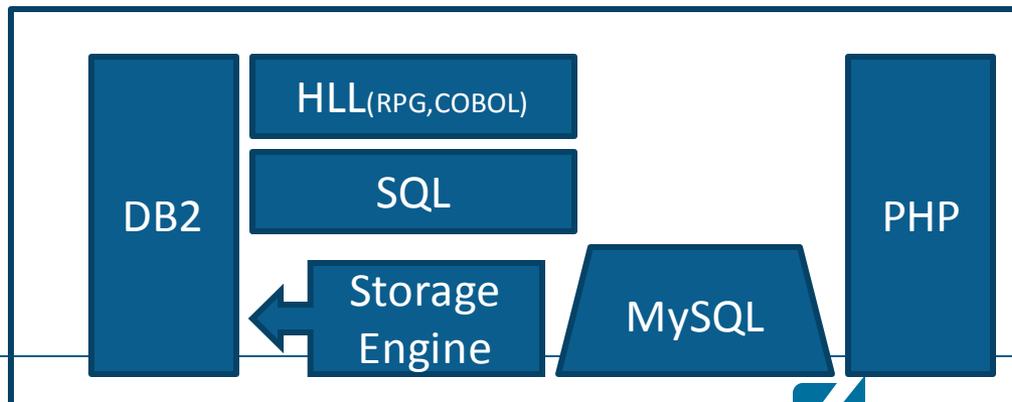
**Zend DBi**

# Zend DBi

- Zend Technologies will provide **Zend DBi** as a drop-in replacement for MySQL on the IBM i platform
- **Zend DBi** will be shipped as a part of Zend Server for IBM i and freely downloadable as a standalone package
- The build will remain open-source and be updated over time to implement relevant bug fixes and features
- IBM will continue to maintain and deliver the DB2 Storage engine for MySQL for IBM i, via Zend Server and as a standalone package

# Why Zend Db?

- COMMON, COMMON Europe and WMCPA (Wisconsin Midrange Computer Professional Association) all use open source application Joomla
- Manage their respective organizations with PHP handling the transactions and presentation layer.
- These organizations depend on MySQL as the database storing content and important transaction processing.



# Why run Maria 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? Soon...

- MySQL is bundled in Zend Server for IBM i
  - Convenient installation
  - Use QSECOFR!
- Available at Zend.com as separate download
- Maria is in last stages of Alpha, private Beta soon



Product	Version	Format/Size	Notes
Zend DBi	5.1.59	<a href="#">(ZIP) 122.03 MB</a>	<a href="#">Readme</a>

# Drupal, Zend Server and IBM i

[www.zend.com](http://www.zend.com)

Drupal

# Drupal is popular



# Statistics

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- 75% of the Internet is running PHP (Google)
- 250 million+ websites running PHP (Netcraft Jan. 2013)
- About 1% of all internet websites are running Drupal
- Drupal is second only to WordPress as a content management site ([backendbattles.com](http://backendbattles.com))

# History of Drupal (Dutch for water dropl



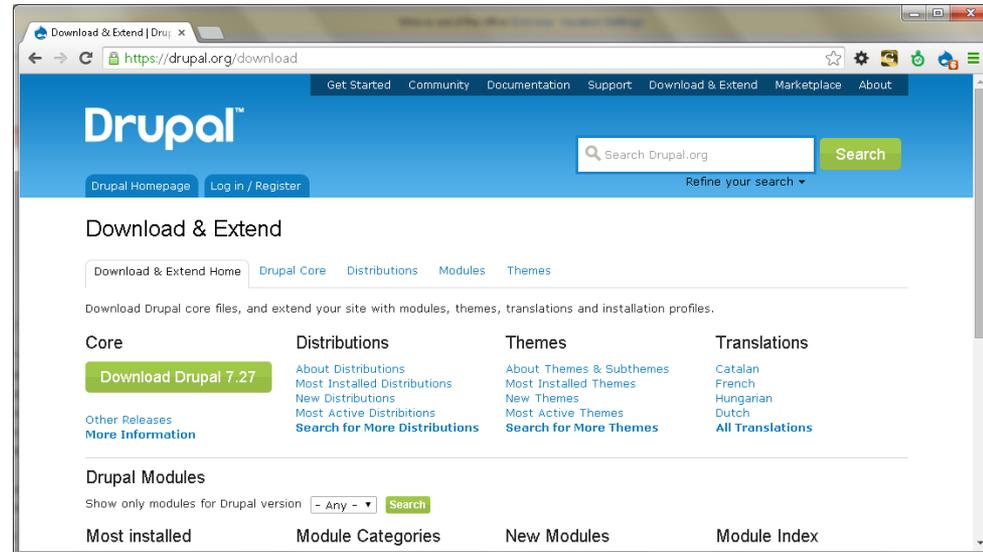
- Dries Buytaert PHD dissertation starts Drupal by accident
- 1999: Developed a message board while studying LAN tech
- 2000: Received a lot of interest from folks
- 2001: Turned it loose as open source Drupal
- 2007: Forms Acquia
- 2008: Dries defends his dissertation
- 2009: Acquia helps launch Whitehouse.gov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



# Drupal itself



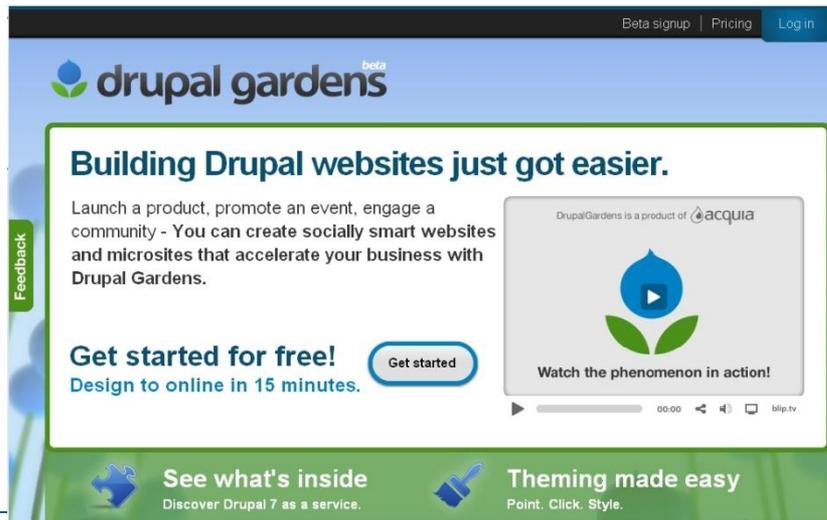
- **Current version “Core” 7.27\***
  - Available at [drupal.org](https://drupal.org)
  - Loads of features like: blogs, forums, content, etc.
  - Key enhancements: Simplified installer, Language support, Update status and more



\*Version at the time this deck was created...

# DrupalGardens

- Runs on Drupal 7
- Hosted solution with three pricing tiers starting at free!
- No need to buy/run server, kick the tires and more
- Drupal in the cloud!



The screenshot shows the DrupalGardens website landing page. At the top right, there are links for "Beta signup", "Pricing", and "Log in". The main header features the "drupal gardens" logo with a "beta" tag. The central content area has a green border and contains the following text: "Building Drupal websites just got easier." followed by "Launch a product, promote an event, engage a community - You can create socially smart websites and microsities that accelerate your business with Drupal Gardens." Below this is a "Get started for free!" section with a "Get started" button and the text "Design to online in 15 minutes." To the right is a video player with a play button and the text "Watch the phenomenon in action!". At the bottom, there are two sections: "See what's inside" with a puzzle piece icon and "Theming made easy" with a paintbrush icon.

# Drupal, Zend Server and IBM i

[www.zend.com](http://www.zend.com)

Drupal Installation

# Drupal Installation Steps

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- **Download drupal & unzip**
  - .tar or .zip ( I like the tar but either should work)
- **Move to the IFS**
- **Untar**
- **Create database**
- **Settings.php**
- **Run install script**
- **Have fun!**

# Download Drupal

The screenshot shows the Drupal.org website's 'Download & Extend' section. The browser address bar displays 'https://drupal.org/download'. The page features a blue header with the Drupal logo and navigation links: 'Get Started', 'Community', 'Documentation', 'Support', 'Download & Extend', 'Marketplace', and 'About'. A search bar is located on the right side of the header. Below the header, the 'Download & Extend' section is active, with sub-links for 'Download & Extend Home', 'Drupal Core', 'Distributions', 'Modules', and 'Themes'. The main content area is divided into four columns: 'Core', 'Distributions', 'Themes', and 'Translations'. The 'Core' column has a prominent green button for 'Download Drupal 7.27'. The 'Distributions' column lists links for 'About Distributions', 'Most Installed Distributions', 'New Distributions', 'Most Active Distributions', and 'Search for More Distributions'. The 'Themes' column lists links for 'About Themes & Subthemes', 'Most Installed Themes', 'New Themes', 'Most Active Themes', and 'Search for More Themes'. The 'Translations' column lists links for 'Catalan', 'French', 'Hungarian', 'Dutch', and 'All Translations'. Below these columns, there is a section for 'Drupal Modules' with a filter for 'Show only modules for Drupal version' set to '- Any -' and a 'Search' button. At the bottom, there are four links: 'Most installed', 'Module Categories', 'New Modules', and 'Module Index'.

# Download the Drupal Version you like...

The screenshot shows the Drupal.org project page. The browser address bar displays 'https://drupal.org/project/drupal'. The main content area is titled 'Following Drupal core development' and includes links for announcements and specific development updates. A 'Support Drupal.org' section features a 'Donate Now' button. The 'Downloads' section is divided into 'Recommended releases' and 'Development releases', each with a table of version, download links, dates, and notes. A right-hand sidebar contains links for committers, a search box for issues, and a statistics graph showing new issues, open bugs, and participants over a 2-year period.

## Following Drupal core development

For announcements of major initiatives and opportunities to contribute, please follow the [Core announcements group](#) (RSS feed, @drupalcore on twitter.).

[Change records for Drupal core](#)

For announcements specifically around Drupal 8 (the unreleased version that is currently in development), please see <http://drupal.org/community-initiatives/drupal-core> and the [Drupal 8 Initiatives group](#) (RSS feed).

## Support Drupal.org

[Donate Now](#) You can give back to the project by making a donation to help fund the Drupal.org website.

## Downloads

### Recommended releases

Version	Download	Date	Links
7.27	<a href="#">tar.gz (3.06 MB)</a>   <a href="#">zip (3.49 MB)</a>	2014-Apr-16	<a href="#">Notes</a>
6.31	<a href="#">tar.gz (1.05 MB)</a>   <a href="#">zip (1.22 MB)</a>	2014-Apr-16	<a href="#">Notes</a>

### Development releases

Version	Download	Date	Links
7.x-dev	<a href="#">tar.gz (3.06 MB)</a>   <a href="#">zip (3.5 MB)</a>	2014-May-02	<a href="#">Notes</a>
6.x-dev	<a href="#">tar.gz (1.05 MB)</a>   <a href="#">zip (1.22 MB)</a>	2014-Apr-16	<a href="#">Notes</a>

[View all releases](#)

[View all committers](#)  
[View commits](#)

## Issues for Drupal core

To avoid duplicates, please search before submitting a new issue.

[Advanced search](#)

All issues  
13639 open, 59711 total

Bug report  
6051 open, 29771 total  
[Subscribe via e-mail](#)

## Statistics

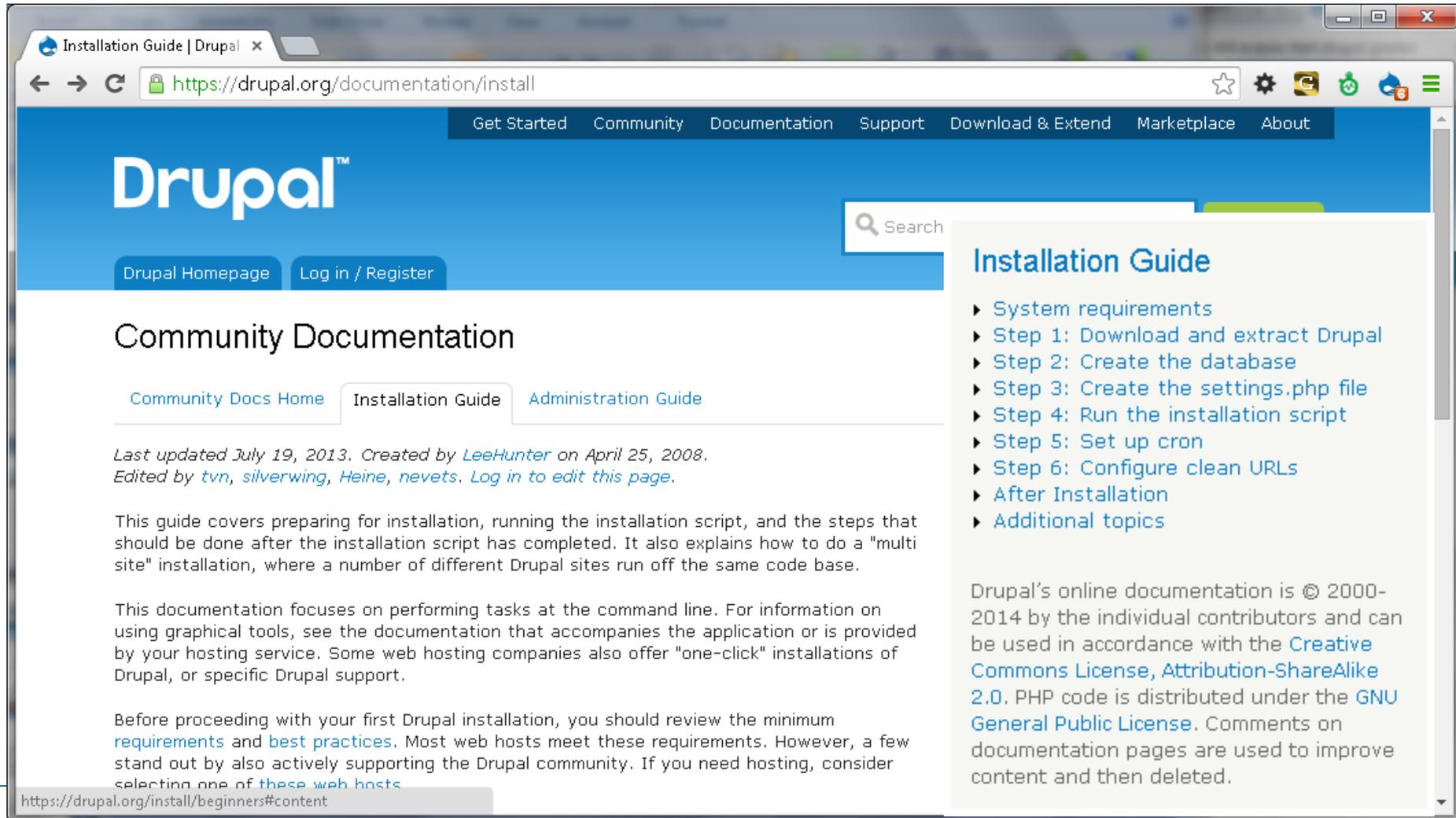
2 year graph, updates weekly

- New issues: 163
- Open bugs: 6004
- Participants: 263

## Resources

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

# Reference the installation doc



The screenshot shows a web browser window displaying the Drupal installation guide. The browser's address bar shows the URL <https://drupal.org/documentation/install>. The page features a blue header with the Drupal logo and navigation links: Get Started, Community, Documentation, Support, Download & Extend, Marketplace, and About. Below the header, there are buttons for "Drupal Homepage" and "Log in / Register". The main content area is titled "Community Documentation" and includes sub-navigation for "Community Docs Home", "Installation Guide" (which is active), and "Administration Guide". The "Installation Guide" section is highlighted with a white background and a blue border. It contains a list of steps for installation, including system requirements, downloading and extracting Drupal, creating a database, creating the settings.php file, running the installation script, setting up cron, and configuring clean URLs. The page also includes a search bar and a footer with the URL <https://drupal.org/install/beginners#content>.

Installation Guide | Drupal x

← → ↻ <https://drupal.org/documentation/install> ☆ ⚙️ 🔄 🌱 🌐 📄 ☰

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# Drupal™

Drupal Homepage Log in / Register

## Community Documentation

Community Docs Home Installation Guide Administration Guide

Last updated July 19, 2013. Created by [LeeHunter](#) on April 25, 2008.  
Edited by [tvn](#), [silverwing](#), [Heine](#), [nevets](#). [Log in to edit this page.](#)

This guide covers preparing for installation, running the installation script, and the steps that should be done after the installation script has completed. It also explains how to do a "multi site" installation, where a number of different Drupal sites run off the same code base.

This documentation focuses on performing tasks at the command line. For information on using graphical tools, see the documentation that accompanies the application or is provided by your hosting service. Some web hosting companies also offer "one-click" installations of Drupal, or specific Drupal support.

Before proceeding with your first Drupal installation, you should review the minimum [requirements](#) and [best practices](#). Most web hosts meet these requirements. However, a few stand out by also actively supporting the Drupal community. If you need hosting, consider selecting one of [these web hosts](#).

<https://drupal.org/install/beginners#content>

## Installation Guide

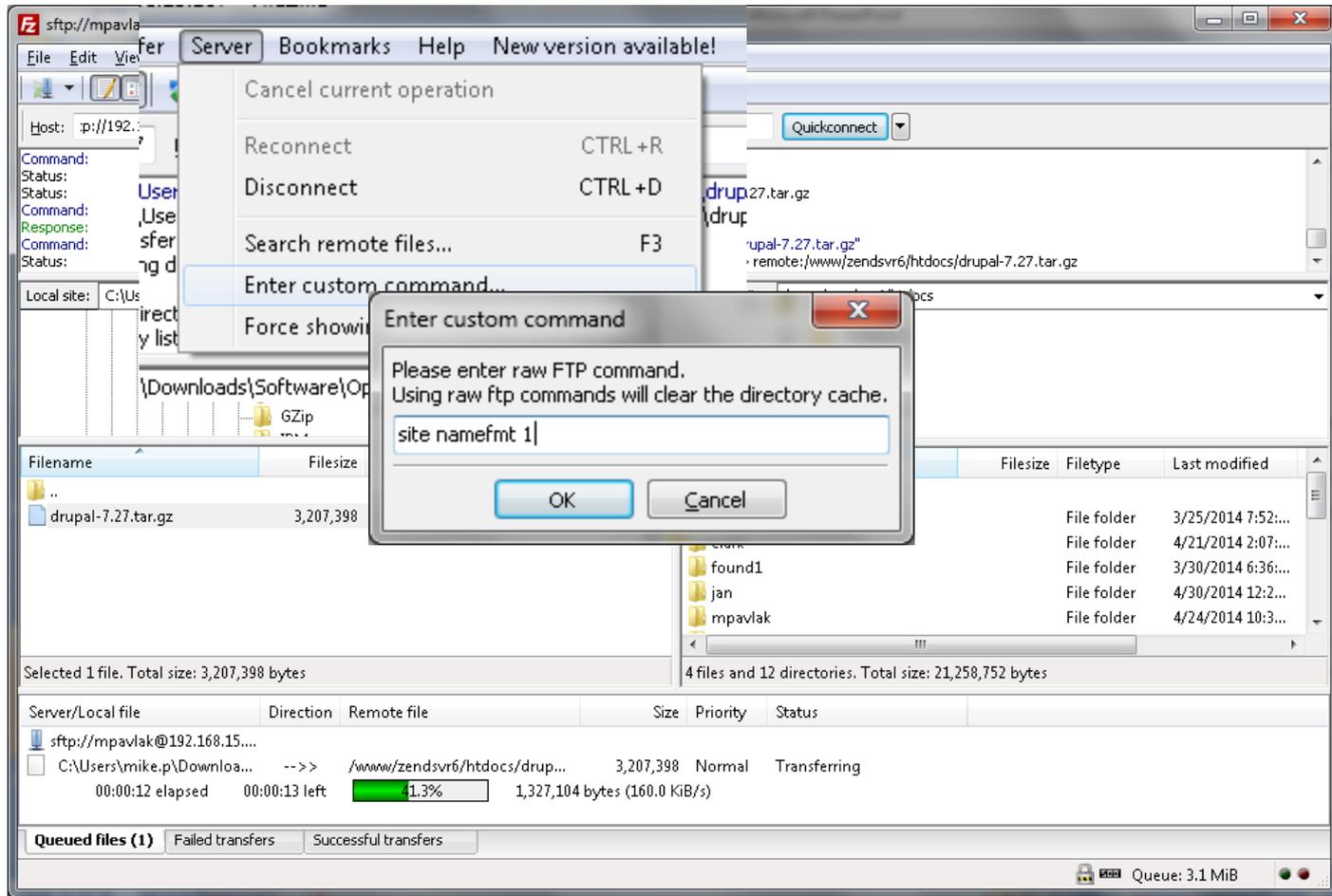
- ▶ System requirements
- ▶ Step 1: Download and extract Drupal
- ▶ Step 2: Create the database
- ▶ Step 3: Create the settings.php file
- ▶ Step 4: Run the installation script
- ▶ Step 5: Set up cron
- ▶ Step 6: Configure clean URLs
- ▶ After Installation
- ▶ Additional topics

Drupal's online documentation is © 2000-2014 by the individual contributors and can be used in accordance with the [Creative Commons License, Attribution-ShareAlike 2.0](#). PHP code is distributed under the [GNU General Public License](#). Comments on documentation pages are used to improve content and then deleted.

# Unpack the file

- Unzip the file locally to extract the tar (7-zip works for me)
  - Or on server: `jar xf files.zip`
  - (Ted Holt: <http://www.itjungle.com/fhg/fhg011112-story02.html>)
- FTP file to the IFS of the IBM i (Filezilla...)
- Start QP2TERM to get PASE command shell
- Issue the standard TAR (Tape Archive) command
  - `tar -xvf drupal-7.27.tar`
- Command details: -xvf means...
  - x = Extract, v = verbose, f = Include file name in command
- Files are unpacked to a directory called drupal-7.27
- Tar command is part of LP's required for Zend Server!

# Notes about filezilla



# Unpack output...

```
Session A - [27 x 132]
File Edit View Communication Actions Window Help
Host: 192.168.15.107 Port: 23 Workstation ID: Disconnect
/QOpenSys/usr/bin/-sh
x drupal-7.27/themes/bartik/css/ie-rtl.css, 849 bytes, 2 media blocks.
x drupal-7.27/themes/bartik/css/layout-rtl.css, 383 bytes, 1 media blocks.
x drupal-7.27/themes/bartik/css/ie6.css, 297 bytes, 1 media blocks.
x drupal-7.27/themes/bartik/css/print.css, 656 bytes, 2 media blocks.
x drupal-7.27/themes/bartik/css/style-rtl.css, 4863 bytes, 10 media blocks.
x drupal-7.27/themes/bartik/css/ie.css, 1119 bytes, 3 media blocks.
x drupal-7.27/themes/bartik/logo.png, 3479 bytes, 7 media blocks.
x drupal-7.27/themes/bartik/templates
x drupal-7.27/themes/bartik/templates/maintenance-page.tpl.php, 2566 bytes, 6 media blocks.
x drupal-7.27/themes/bartik/templates/page.tpl.php, 10230 bytes, 20 media blocks.
x drupal-7.27/themes/bartik/templates/node.tpl.php, 5404 bytes, 11 media blocks.
x drupal-7.27/themes/bartik/templates/comment.tpl.php, 4004 bytes, 8 media blocks.
x drupal-7.27/themes/bartik/templates/comment-wrapper.tpl.php, 2002 bytes, 4 media blocks.
x drupal-7.27/LICENSE.txt, 18092 bytes, 36 media blocks.
x drupal-7.27/robots.txt, 1561 bytes, 4 media blocks.
x drupal-7.27/COPYRIGHT.txt, 1481 bytes, 3 media blocks.
$
==> tar -xvf drupal-7.27.tar

F3=Exit F6=Print F9=Retrieve F11=Truncate/Wrap
F13=Clear F17=Top F18=Bottom F21=CL command entry
MÁ A 21/007
I902 - Session successfully started
```

# ADDLNK

```
Session A - [24 x 80]
File Edit View Communication Actions Window Help
Host: 192.168.15.107 Port: 23 Workstation ID: Disconnect

Work with Object Links

Directory . . . . : /www/zendsvr6/htdocs

Type options, press Enter.
 2=Edit   3=Copy   4=Remove   5=Display   7=Rename   8=Display attributes
11=Change current directory ...

Opt  Object link      Type      Attribute  Text
---  ---
---  @LongLink         STMF
---  adam              DIR
---  clark             DIR
---  drupal            DIR
---  drupal-7.27       DIR
---  drupal-7.27.tar   STMF
---  dummy.php         STMF
---  found1           DIR
---  index.html        STMF

More...

Parameters or command
==> ADDLNK OBJ('/www/zendsvr6/htdocs/drupal-7.27') NEWLNK(drupal)
F3=Exit   F4=Prompt   F5=Refresh   F9=Retrieve   F12=Cancel   F17=Position to
F22=Display entire field   F23=More options

MA A 21/007
1902 - Session successfully started
```

# Database is Maria

- Use phpMyAdmin or something. Command line can work



**Getting Started**

Deploy an example application that includes monitoring and caching rules, events, recurring jobs, and more...

[DEPLOY NOW](#)

[Watch More Videos >](#)

DEPLOY  SAMPLE APPS



  
Welcome to phpMyAdmin

**Language**

English ▾

**Log in** 

Username:

Password:

[Go](#)

# Navigate to USER screen, add user

## Add user

**Login Information**

User name: Use text field: ▼

Host: Local ▼  [?](#)

Password: Use text field: ▼

Re-type:

Generate password:

**Database for user**

Create database with same name and grant all privileges

Grant all privileges on wildcard name (username\\_%)

# Copy the settings file and change security

- Go to PASE command shell
- Set directory `cd /www/zendsvr6/htdocs/drupal-7.27/sites/default`
- `cp default.settings.php settings.php`
  
- `chmod a+w settings.php`
  
- Remember where this file is as you will

```
$  
> ls  
default.settings.php  
$  
> cp default.settings.php settings.php  
$  
> ls  
default.settings.php settings.php  
$  
> pwd  
/www/zendsvr6/htdocs/drupal-7.27/sites/default  
$  
> chmod a+w settings.php  
$
```

# Change security on the default directory

- Drupal will need to add a directory to the defaults directory
- Navigate to the sites directory and enable write access

```
> pwd
/www/zendsvr6/htdocs/drupal-7.27/sites/default
$
> cd..
/QOpenSys/usr/bin/-sh: cd..: not found.
$
> cd ..
$
> pwd
/www/zendsvr6/htdocs/drupal-7.27/sites
$
> chmod a+w default
$
```

# Install Drupal

192.168.15.107:10080/drupal/install.php

## Select an installation profile



- Standard  
Install with commonly used features pre-configured.
- Minimal  
Start with only a few modules enabled.

**► Choose profile**

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

Save and continue

# Choose a language

## Choose language



English (built-in)

[Learn how to install Drupal in other languages](#)

Save and continue

✓ Choose profile

▶ **Choose language**

Verify requirements

Set up database

Install profile

Configure site

Finished

# Setup database

## Database configuration



- ✓ Choose profile
- ✓ Choose language
- ✓ Verify requirements

### ▶ Set up database

- Install profile
- Configure site
- Finished

#### Database type \*

- MySQL, MariaDB, or equivalent
- SQLite
- PostgreSQL

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

#### Database name \*

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

#### Database username \*

#### Database password

#### ▶ ADVANCED OPTIONS

Save and continue



# Configure

### Configure site



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

Finished

**⚠** 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, consult the [online handbook](#).

#### SITE INFORMATION

**Site name \***

**Site e-mail address \***

Automated e-mails, such as registration information, will be sent from this address. Use an address ending in your site's domain to help prevent these e-mails from being flagged as spam.

### SERVER SETTINGS

**Default country**

Select the default country for the site.

**Default time zone**

By default, dates in this site will be displayed in the chosen time zone.

### SITE MAINTENANCE ACCOUNT

**Username \***

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

**E-mail address \***

**Password \***

Password strength:  **Good**

### UPDATE NOTIFICATIONS

- Check for updates automatically
- Receive e-mail notifications

The system will notify you when updates and important security releases are available for installed components. Anonymous information about your site is sent to [Drupal.org](#).

# You're done with the install!!!

## Drupal installation complete



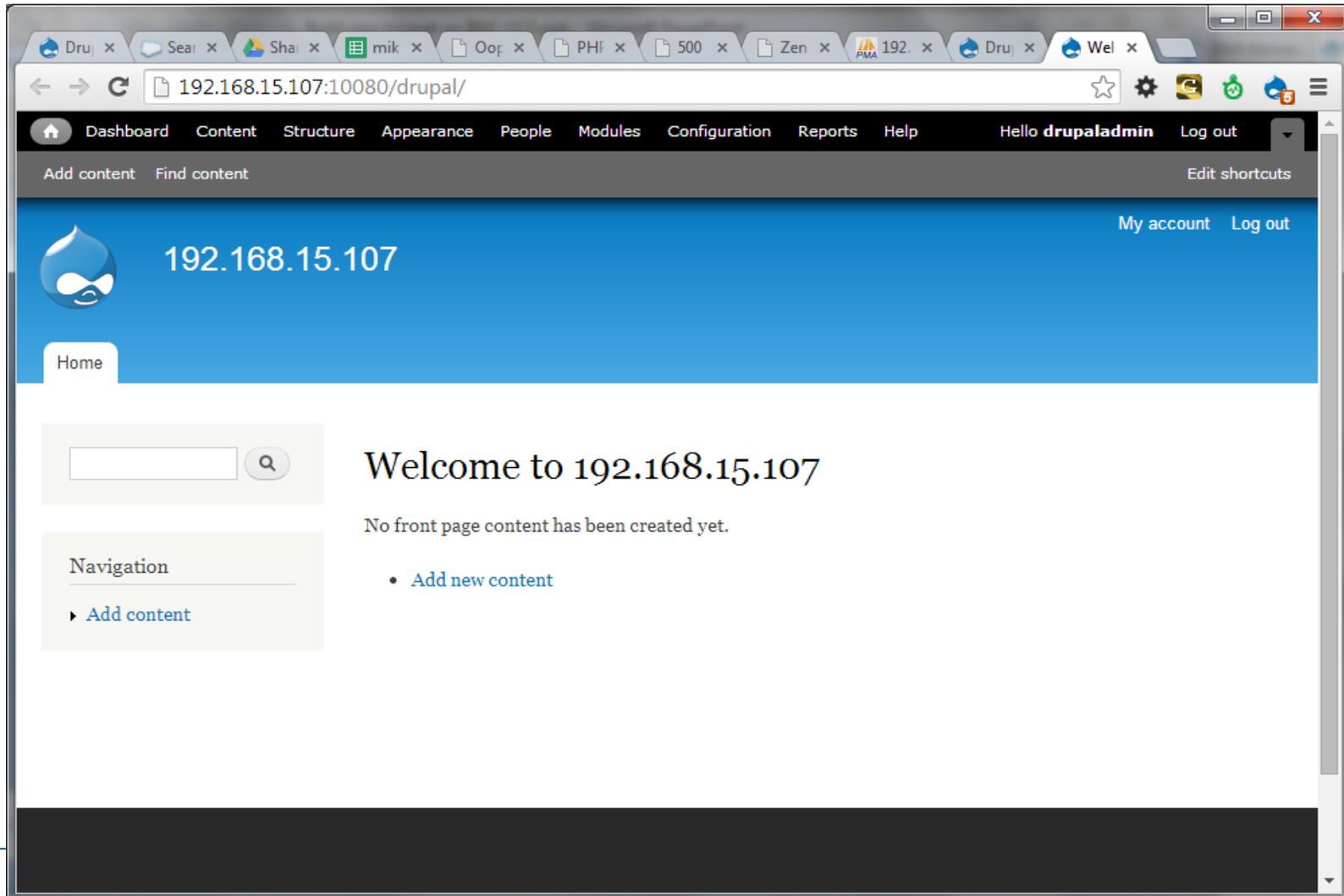
Congratulations, you installed Drupal!

Visit your new site.

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

*Let's start!*

# Your first drupal page...



# Drupal, Zend Server and IBM i

[www.zend.com](http://www.zend.com)

Drupal Tour

# Tour key features of Drupal

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- **Module selection**
- **Theme selection**
- **Create page of content**

# Let's add an article

Home

▶ Article

Use *articles* for time-sensitive content like news, press releases or blog posts.

▶ Basic page

Use *basic pages* for your static content, such as an 'About us' page.

No front page content has been created yet.

# Resources

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- **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/>

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Accelerate great PHP Oct 18-21, Las Vegas



## ATTEND

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Visit [zendcon.com](http://zendcon.com)



# Q&A

[www.zend.com](http://www.zend.com)

[mike.p@zend.com](mailto:mike.p@zend.com)

*Please fill out your Session Evaluation!*

A screenshot of a session evaluation form. The form is titled "2005 Business & Marketing Evaluation" and "Professional Development Evaluation". It contains several sections with checkboxes and input fields for rating various aspects of the session. The form is partially filled out with handwritten marks.