# **BOA: Drupal Utopia**

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Drupal Camp Charlotte

June 10, 2012



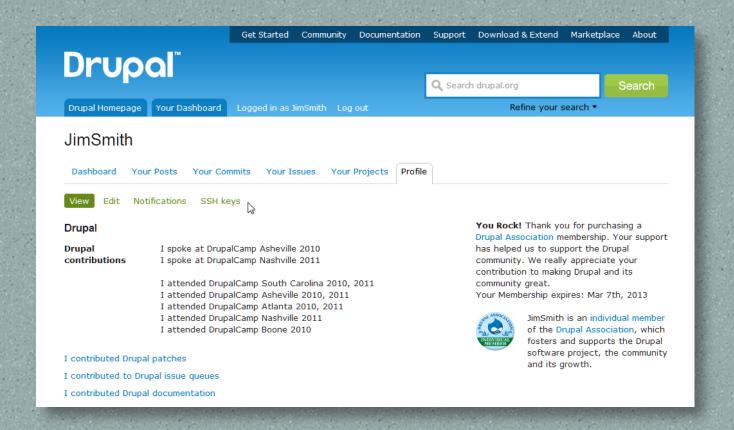
#### About me



Director, Online Media
WATE-TV / WATE.com – Knoxville, Tenn.



## About me



**Drupal user since 2007** drupal.org/user/16880



# About me



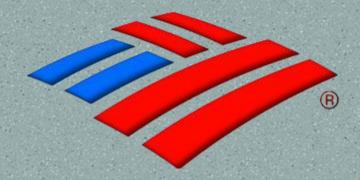
startinggravity.com



# What is BOA?

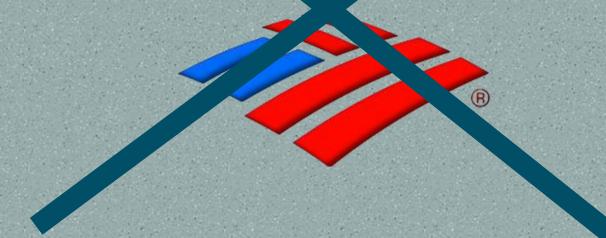


# BankofAmerica





# BankafAmerica





# Barracuda



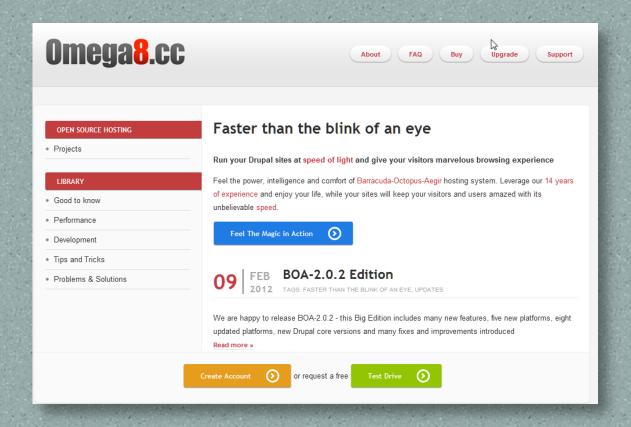
# Barracuda Octopus



# Barracuda Octopus Aegir



## Maintainer



Omega8.cc



# Barracuda Octopus Aegir



# Aegir



A simple Drupal based hosting front end for managing an entire network of sites



#### Barracuda



A bash script to install and upgrade an Aegir Master Instance on a server tuned for high performance



### Octopus



# A bash script to install and upgrade Aegir Satellite Instances



## Octopus



diPressflow





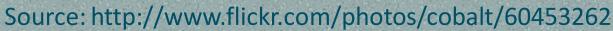


OpenChurch

A bash script to install and upgrade Aegir Satellite Instances











Source: http://flickr.com/photos/spackletoe/90811910





Source: http://www.flickr.com/photos/jodigreen/36199609

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# Set up a VPS or dedicated server



# Not just any VPS

Should be Xen, VServer, Linux KVM or Vmware-based, not Virtuozzo/OpenVZ.



# Supported LTS OS

(32/64bit minimal, fresh install)

- Debian 6.0 Squeeze (recommended)
- Ubuntu Precise 12.04
- Ubuntu Lucid 10.04



# Required

Port 9418 open for Git

Minimum 512 MB of RAM

(Minimum 2 GB of RAM with Solr/Tomcat enabled)



# Required

Basic sysadmin skills and experience





Source: http://www.flickr.com/photos/snacktime2007/4283740599



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# Point your domain to your server



A/AAAA Records			
Hostname	IP Address	TTL	Options
	66.228.58.52	Default	Edit   Remove
*	66.228.58.52	Default	Edit   Remove
mail	66.228.58.52	Default	Edit   Remove
www	66.228.58.52	Default	Edit   Remove
			Add a new A record

# Set the 'A' records at your host company



CHANGE	EXISTING	DOMAIN NAM	E SERVER	INFORMATION
CHANGE		DOMESTIC TACK		THOUSAND TON

You can change the existing domain name server (DNS) information below. This option is typically used when you change your web hosting company etc. Please note that it will take up to 24 hours for the changes to take effect.

- Use NameCheap Hosting DNS Servers
- Specify Custom DNS Servers ( Your own DNS Servers )
  - 1. ns1.linode.com
  - 2. ns2.linode.com
  - з. ns3.linode.com
  - 4. ns4.linode.com
  - ns5.linode.com

Add More Nameservers

# Tell your domain registrar where your nameservers are located



```
_ - X
Command Prompt
C:\Users\Jim>ping smithbasement.info
Pinging smithbasement.info [216.119.147.118] with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 216.119.147.118:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Users\Jim>ping smithbasement.info
Pinging smithbasement.info [216.119.145.221] with 32 bytes of data:
Reply from 216.119.145.221: bytes=32 time=23ms TTL=52
Reply from 216.119.145.221: bytes=32 time=21ms TTL=52
Reply from 216.119.145.221: bytes=32 time=20ms TTL=52
Reply from 216.119.145.221: bytes=32 time=19ms TTL=52
Ping statistics for 216.119.145.221:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 19ms, Maximum = 23ms, Average = 20ms
C:\Users\Jim>_
```

#### Confirm the domain has moved



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# Configure the server



# Log into your new server using SSH



#### Set the hostname

```
$ echo "aegir.DOMAIN.com" > /etc/hostname
```

```
$ hostname -F /etc/hostname
```



# Set up an OpenSSH pubic and private key

Follow directions at

https://help.ubuntu.com/community/SSH/OpenSSH/Keys



# Configure OpenSSH to authenticate with pubic keys only

\$ vim /etc/ssh/sshd\_config



# Change sshd\_config to read:

PasswordAuthentication no ChallengeResponseAuthentication no UsePAM no



#### Then reload SSH

\$ service ssh reload



Log into your new server again using your new public key



4

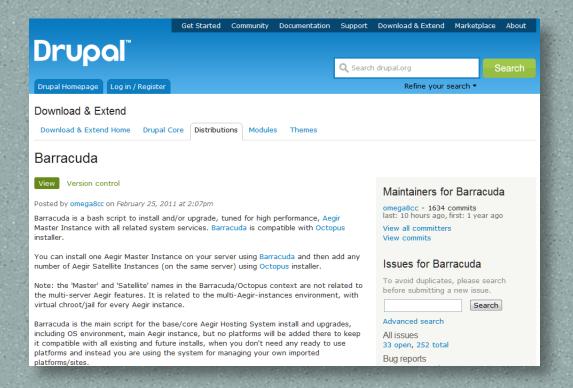
# Read the documentation



4

# Seriously. RTFM





# Barracuda Project Page http://drupal.org/project/barracuda



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# Download and run the Barracuda bash script



# Download and run BOA Meta Installer

```
$ wget -q -U iCab
http://files.aegir.cc/versions/BOA.sh.txt
```

\$ bash BOA.sh.txt



#### Install Barracuda and Octopus

```
$ boa in-stable public server.mydomain.org
my@email
```

See /docs/INSTALL.txt for options





# Just follow the directions and you'll be fine

Source: http://www.flickr.com/photos/ fabrizio /1578087736

Starting Gravity

- Everything needed to run Aegir
- MariaDB or Percona database server
- Nginx web server
- PHP-FPM 5.3.13 and PHP-FPM 5.2.17
- Extras to tune for high performance



- Redis cache server with standard DB auto-failover
- New Relic Server and Apps Monitor
- Entry level XSS built-in protection on the Nginx level
- Autonomous Maintenance & Auto-Healing scripts



- Automated, rotated daily DB backups
- MultiCore Apache Solr with Tomcat
- Fast proxy DNS server (pdnsd) with permanent caching
- Bind9 DNS server integrated with experimental Aegir DNS feature



- Webmin Control Panel
- Firewall csf/lfd with Nginx abuse guard
- Chive database manager
- SQL Buddy database manager
- Collectd server monitor



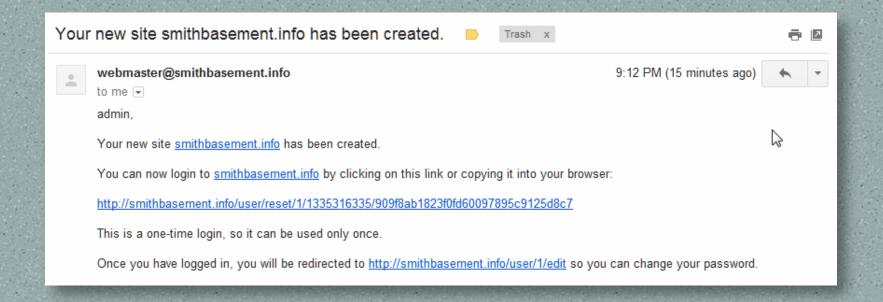
- Limited shell, SFTP and FTPS separate accounts per Octopus instance.
- Limited shell and FTPS separate accounts per Aegir Client/Developer



# Install additional instances of Octopus

\$ boa in-stable public server.mydomain.org
my@email o2





# A confirmation email tells you you're ready to go





# Don't get tripped up. Read your email!



#### #4. ADDING MODULES & THEMES

To add modules/themes to any of the enabled platforms, you need to log into your FTPS/SSH account:

host: o1.aegir.smithbasement.info

user: o1.ftp pass: P9tXOFpy

To see all available shell commands please type "help" when logged in via SSH.

Please change your password via SSH with "passwd" command at least every 3 months. Otherwise the password will expire in 90 days and you will have to log in via SSH to restore your FTP access.

We recommend using SSH keys instead of password.

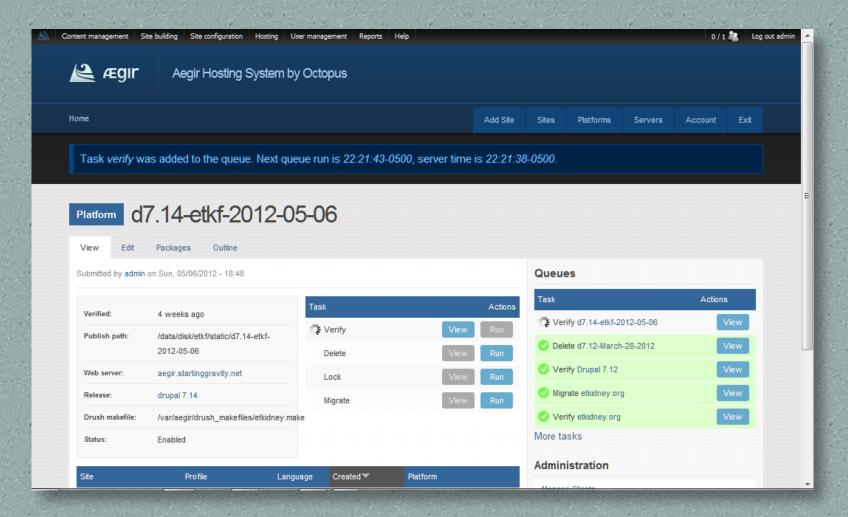
# The email contains important login information





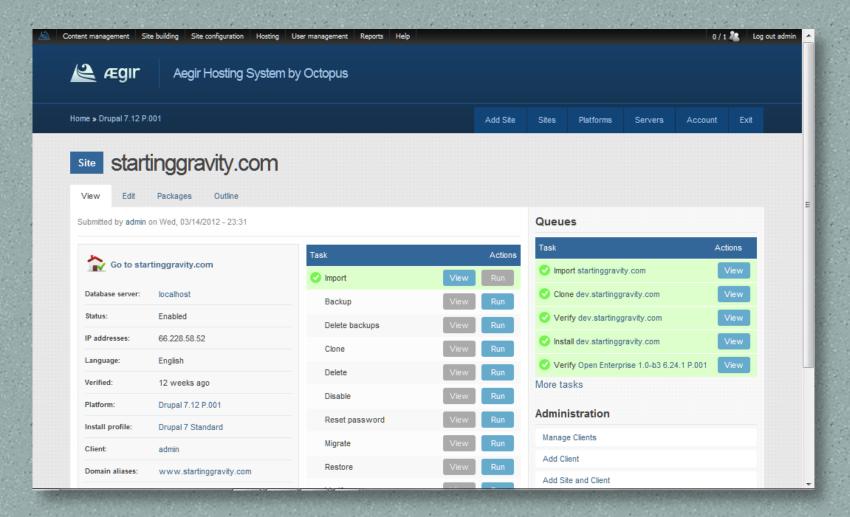
Dashboard page





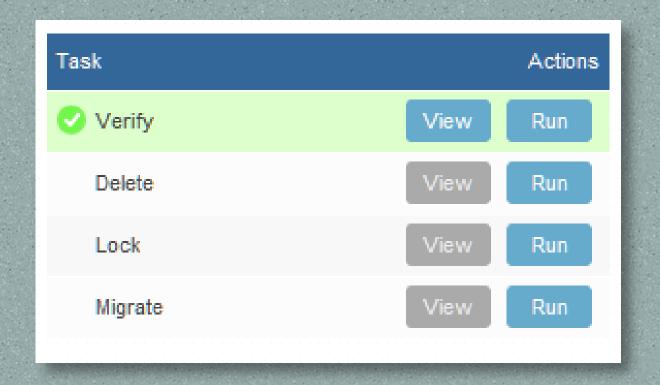
#### Platform page





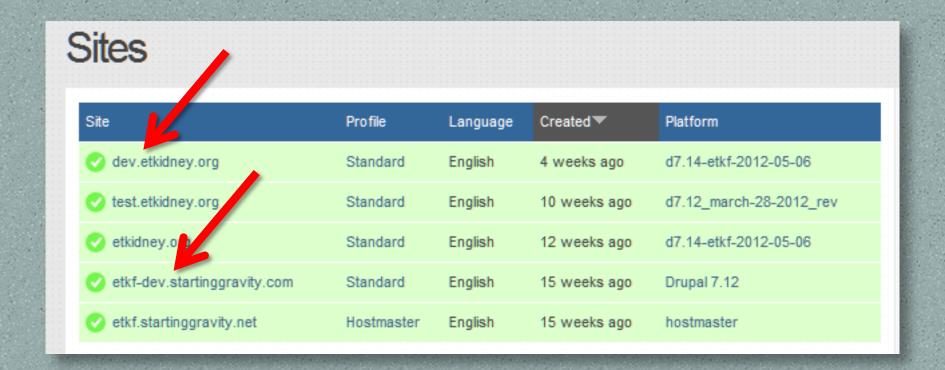
Site page





Verify your platform before running any other task





Include 'dev' in the subdomain to disable extra caching.



Create a new platform, then migrate your site to it.

Using 'drush up' is not the Aegir way!



```
core = 7.x
    api = 2
    projects[drupal][version] = 7
    projects[] = ctools
    projects[] = context
    projects[date] = 2.x-dev
    projects[] = ds
    projects[] = nodereference url
12 projects[] = addtoany
13 projects[] = pathauto
14 projects[] = token
    projects[] = rules
    projects[] = service links
    projects[] = ckeditor
    projects[] = imce wysiwyg
```

# Create a new platform using Drush Make.



# Move an existing site into an Octopus instance

#### Instructions at

http://omega8.cc/import-your-sites-to-aegir-in-8-easy-steps-109



You don't necessarily need more than one Octopus instance, but having more keeps a better wall between sites.

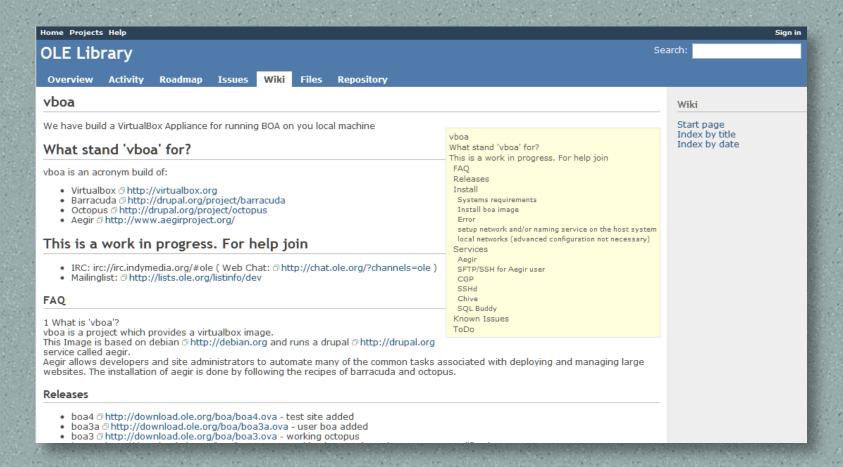


You don't necessarily need more than one Octopus instance, but having more keeps a better wall between sites.



# Your own private Barracuda/Octopus/Aegir installation is possible!



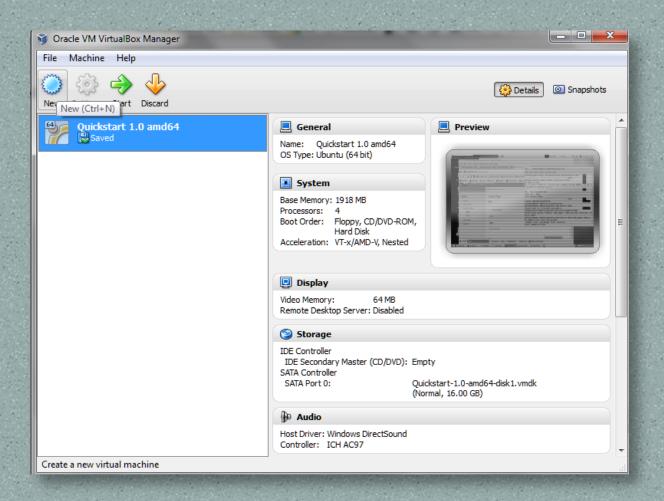


https://ole-apps.sourcerepo.com/redmine/ole/ projects/ole-toolkit/wiki/Vboa

```
61 ### Installing BOA system on localhost
63 1. Please read docs/NOTES.txt
65 2. Download and run BOA Meta Installer.
66
67
      $ wget -g -U iCab http://files.aegir.cc/versions/BOA.sh.txt
      & bash BOA.sh.txt
68
70 3. Install Barracuda and Octopus.
71
72
      NOTE: You must specify the kind of install with {in-stable|in-head}.
73
            location with {local|public}, and your e-mail address,
74
            as shown below. For local installs you don't need to specify
75
            hostname and Octopus username, as it is fully automated.
76
            The last {ask|mini|max} part is optional, if you wish to control
            Octopus platforms install mode, as explained below - none is
78
            the same as "ask".
79
80
      # Stable on localhost - prompt for every platform install
81
      $ boa in-stable local mv@email
82
83
      # Stable on localhost - no prompt with 3xD6 + 3xD7 + Atrium only
84
      $ boa in-stable local mv@email mini
85
86
      # Stable on localhost - no prompt with all platforms installed
87
      $ boa in-stable local mv@email max
88
89
      # To install HEAD instead of Stable, use the same commands, but
90
        replace "in-stable" with "in-head"
91
```

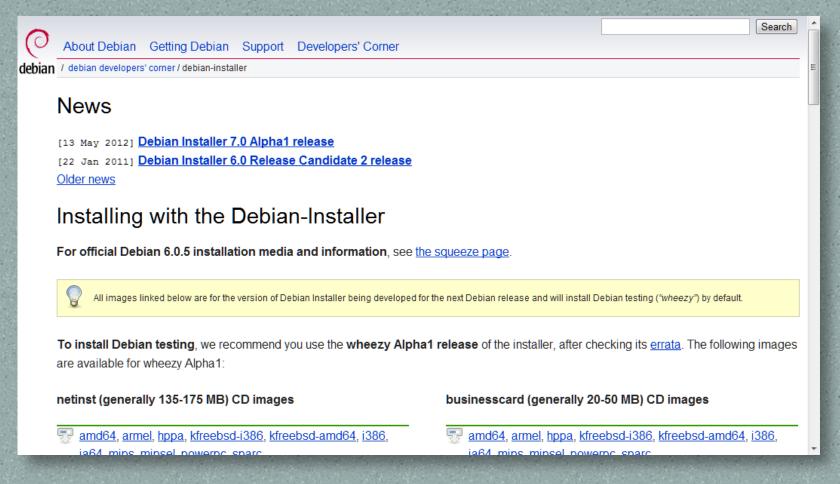
#### /docs/INSTALL.txt





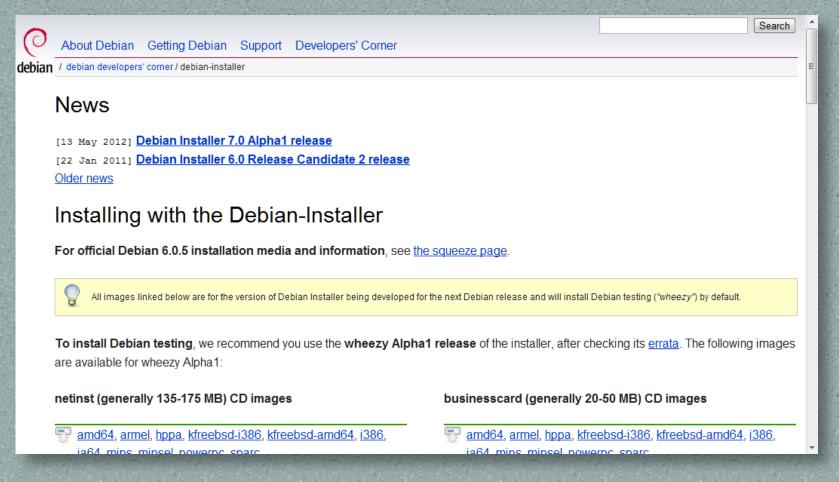
#### **VirtualBox**





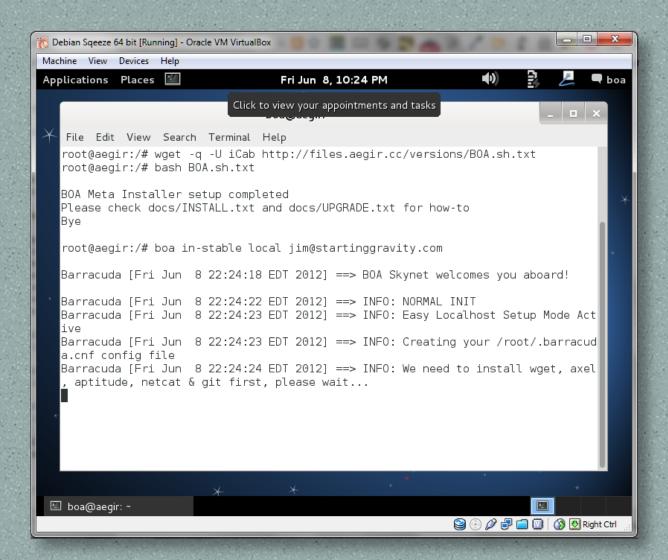
http://www.debian.org/devel/debian-installer/





http://www.debian.org/devel/debian-installer/









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