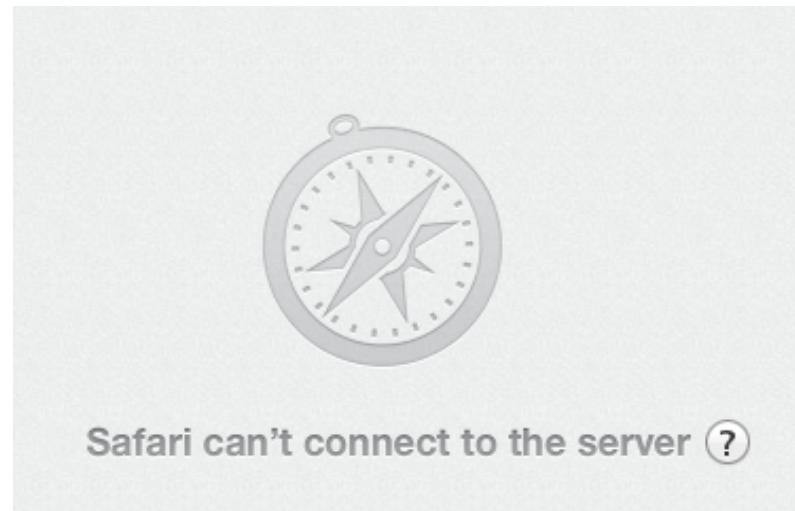


Melting Snowflake Service with Ansible

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Migrate servers!



Install a production like environment with ubuntu

1. Get ubuntu 10.04 LTS (<http://releases.ubuntu.com/lucid/>)

- Install it with sshd and postgres 8.4
- sudo apt-get update
- sudo apt-get upgrade. If you get an error message like this, you can fix it by setting LC_ALL="en_GB.UTF-8" in the file /etc/default/locale.

```
perl: warning: Setting locale failed.  
perl: warning: Please check that your locale settings:  
    LANGUAGE = (unset),  
    LC_ALL = (unset),  
    LC_CTYPE = "UTF-8",  
    LANG = "en_US.UTF-8"  
are supported and installed on your system.
```

2. Install RVM (<http://beginrescueend.com/>)

- sudo apt-get install curl git-core ruby
- bash -s stable < <(curl -s https://raw.github.com/wayneeseguin/rvm/master/binscripts/rvm-installer)
- source .profile
- Follow instructions on rvm requirements
- rvm install 1.9.3

3. Install gitosis (<https://help.ubuntu.com/community/Git>)

- sudo apt-get -y install git-core gitosis
- sudo -H -u gitosis gitosis-init < YOUR_PUBLIC_KEY_ON_YOUR_LAPTOP
- git clone gitosis@YOUR OWN TESTCOPY:gitosis-admin.git
- Create a new project in gitosis.conf in the just cloned folder like:

```
[freemle-test]  
writable = freemle-test  
members = keyfilename
```

- git commit -a -m "Added a new project"
- git push
- In the freemle project: git remote add freemle-test gitosis@YOUR_TEST_SERVER:freemle-test.git
- git push freemle-test master
- Add the script/git-hooks/post-recieve hook in /srv/gitosis/repositories/freemle-test.git/. Change the user ZILVERLINE with the user you will be using to run freemle.

4. Install apache-fop-server for pdf creation (<https://github.com/zilverline/apache-fop-server>)

- sudo useradd -m apache-fop
- mkdir /opt/apps/apache-fop-server
- chown -R apache-fop: /opt/apps/apache-fop-server
- cd /opt/apps/apache-fop-server
- sudo -u apache-fop -s
- wget --username=YOUR_NEXUS_USERNAME --password=YOUR_NEXUS_PASSWORD http://nexus.zilverline.com/nexus/content/repositories/releases/org/zilverline/apache-fop-server/VERSION/apache-fop-server-VERSION-bin.tar.gz
- tar xvzf apache-fop-server-1.0-bin.tar.gz
- Copy script/production/etc/init/apache-fop.conf to /etc/init and adjust settings.¶
- Install java sudo apt-get install openjdk-6-jdk
- Start apache-fop

5. Configure apache



#fail

**The result is a unique snowflake – good for a
ski resort, bad for a data center.**

<http://martinfowler.com/bliki/SnowflakeServer.html> – Martin Fowler



Melt the
snowflakes



Ansible

- Requires no additional software on the hosts
- Declarative actions (typically one-, two-liners)
- Idempotent out-of-the-box
- Vast amount of available modules
- Very active community

Docs » All Modules

All Modules



- accelerate - Enable accelerated mode on remote node
- acl - Sets an IP ACL rule
- add_host - Adds a host to the ansible-playbook in-memory inventory
- airbrake_de
- alternative:
- apache2_module - enables/disables Apache2 modules
- apt - Manages apt-packages
- apt_key - Manages apt keys
- apt_repository - Manages apt repositories
- arista_eos - Manages Arista EOS hosts
- arista_nxos - Manages Arista NXOS hosts
- arista_vxlan - Manages Arista VXLAN hosts
- assert
- async
- at - Schedule tasks
- auth
- bigip_facts - Connects to BIG-IP and gathers facts
- bigip_monitor_http - Manages BIG-IP monitor HTTP
- bigip_monitor_tcp - Manages BIG-IP monitor TCP
- bigip_node - Manages F5 BIG-IP nodes
- bigip_pool - Manages F5 BIG-IP pools
- bigip_pool_member - Manages F5 BIG-IP pool members
- boundary_meter - Manage boundary meters
- bzr - Deploys code via bzr
- campfire - Synchronizes files between Campfire and Ansible
- capabilities
- cloudform
- command - Executes a command on a remote node
- composer - Dependency Manager for PHP
- copy - Copies files to remote locations.
- cpanm - Manages Perl library dependencies.
- cron - Manage crond and crontab entries.
- datadog_event - Posts events to DataDog service
- debconf - Configure a .deb package
- debug - Print statements during execution
- digital_ocean - Create/delete a droplet/SSH_key in DigitalOcean

Demo contents

- Vagrant with Virtual Box
- Exploring Ansible
 - Host files
 - Modules
 - Facts
 - Playbooks
 - Roles
 - Variables
- Rolling updates using Docker

```
mail.example.com
```

```
[webservers]  
foo.example.com  
bar.example.com
```

```
[dbservers]  
one.example.com  
two.example.com  
three.example.com
```

Show me the
code!

Dear demo
gods....

<https://github.com/zilverline/goto-ansible>

