Data Center in a Wiki

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Documentation Problems
• Keeping track of server farm build-outs
• Documentation un-maintainable (time)
• No time to update documentation
Benefits
• Concepts can apply to any process, not just building server farms

• Benefits of automation and expression provide endless possibilities for solving problems
• Simplification of build outs
• Available to anyone
• Code & Process improvement
• Reduction of errors
• Up to date
Automate & Standardize
Before Document Automation

- http://wiki.tld
- Some server farm design
  - Network configs
- Applications
- Servers

SysAdmin

XML

puppet labs

CHEF

Engine
Before Document Automation

Some server farm design
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Applications
Servers

SysAdmin

http://wiki.tld

Chef
Puppet Labs
Engine
Farm (Environment) Name
MyProductionWebsite-DEV

Servers

<table>
<thead>
<tr>
<th>Hostname</th>
<th>IP</th>
<th>Subnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>appserver1</td>
<td>10.10.1</td>
<td>255.255.254.0</td>
</tr>
<tr>
<td>appserver2</td>
<td>10.10.2</td>
<td>255.255.254.0</td>
</tr>
<tr>
<td>dbserver1</td>
<td>10.10.20.1</td>
<td>255.255.255.0</td>
</tr>
</tbody>
</table>

Networking Information

ACLs
10.10.10.2

VIPs
appvip1.vip.mydomain.com

Applications
Tomcat
CustomWARFile1
Future Automation with Documentation
Server Farm Design Template
Servers
Network configs
Applications

Handling Engine (Daemon)
General Provisioning Config
Validate Config
Make config available for provisioning

http://wiki.tld
SOAP/XMLRPC

SysAdmin

Approve (y/n)?

puppet labs
Chef
CFengine

Friday, November 12, 2010
Handling Engine (Daemon)

General Provisioning Config
Validate Config
Make config available for provisioning

http://wiki.tld

SysAdmin

Approve (y/n)?

Server Farm Design Template
Servers
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SOAP/XMLRPC

puppet labs

Chef

CFengine
Server Farm Design Template
I want five database servers
The IP range is 10.10.1.0/24

I want five app servers with MyApp1 installed in IP range 10.10.1.0/24

System Automation (Vision) 2.0

Handling Engine (Daemon)
- General Provisioning Config
- Validate Config
- Make config available for provisioning

Inventory + Translation Engine
- Interpret Human Language Input
- Gather assets from CMDB
- Pass result to Handling engine

http://wiki.tld

SOAP/XMLRPC

Approve (y/n)?

SysAdmin
I want five database servers
The IP range is 10.10.1.0/24

I want five app servers with
MyApp1 Installed in IP range
10.10.1.0/24

The database vip is dbvip1
The app vip is appvip1
The Web vip is webvip1
Documentation holds a great wealth of power by fusing the expressiveness of documentation with automated systems.

- Underutilized
- Expressive
How can you leverage documentation and automation to solve problems in your daily operations and software development?
Q+A

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