Chapter 1

```
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group
 default
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast stat
e UP group default qlen 1000
    link/ether 04:01:84:69:b8:01 brd ff:ff:ff:ff:ff:ff
    inet 46.101.73.192/21 brd 46.101.79.255 scope global eth0
       valid_lft forever preferred_lft forever
    inet 10.16.0.12/16 scope global eth0
       valid_lft forever preferred_lft forever
    inet6 fe80::601:84ff:fe69:b801/64 scope link
       valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast stat
e UP group default qlen 1000
    link/ether 04:01:84:69:b8:02 brd ff:ff:ff:ff:ff:ff
    inet 10.131.67.168/16 brd 10.131.255.255 scope global eth1
       valid_lft forever preferred_lft forever
    inet6 fe80::601:84ff:fe69:b802/64 scope link
       valid_lft forever preferred_lft forever
```

```
root@babel:~# ip -s link
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN mode
DEFAULT group default
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    RX: bytes   packets   errors   dropped overrun mcast
    0           0         0        0       0       0
    TX: bytes   packets   errors   dropped carrier collsns
    0           0         0        0       0       0
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast stat
e UP mode DEFAULT group default qlen 1000
    link/ether 04:01:84:69:b8:01 brd ff:ff:ff:ff:ff:ff
    RX: bytes   packets   errors   dropped overrun mcast
    46976795    5860      0        0       0       0
    TX: bytes   packets   errors   dropped carrier collsns
    416308      3526      0        0       0       0
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast stat
e UP mode DEFAULT group default qlen 1000
    link/ether 04:01:84:69:b8:02 brd ff:ff:ff:ff:ff:ff
    RX: bytes   packets   errors   dropped overrun mcast
    0           0         0        0       0       0
    TX: bytes   packets   errors   dropped carrier collsns
    578         7         0        0       0       0
root@babel:~#
```

```
root@babel:~# ip -s -s link ls eth0
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast stat
e UP mode DEFAULT group default qlen 1000
    link/ether 04:01:84:69:b8:01 brd ff:ff:ff:ff:ff:ff
    RX: bytes   packets  errors   dropped overrun mcast
    46980360    5904     0        0       0       0
    RX errors: length   crc       frame   fifo    missed
               0         0         0       0       0
    TX: bytes   packets  errors   dropped carrier collsns
    422881      3563     0        0       0       0
    TX errors: aborted fifo      window  heartbeat
               0         0         0       0
root@babel:~#
```

```
root@babel:~# ss -t
State      Recv-Q Send-Q      Local Address:Port          Peer Address:Port
ESTAB      0      0           46.101.73.192:ssh          86.143.240.133:55538
ESTAB      0      0           46.101.73.192:ssh          86.143.240.133:55518
ESTAB      0      0           46.101.73.192:51599           91.189.91.23:http
ESTAB      0      226         46.101.73.192:37303        103.253.144.50:http
ESTAB      0      0           46.101.73.192:49947            5.101.111.50:http
root@babel:~#
```

```
root@babel:~# ss -ltn
State        Recv-Q Send-Q        Local Address:Port        Peer Address:Port
LISTEN       0      128                     *:22                      *:*
LISTEN       0      128           127.0.0.1:6379                      *:*
LISTEN       0      128                     *:80                      *:*
LISTEN       0      128                   :::22                     :::*
LISTEN       0      128                   :::80                     :::*
root@babel:~# 
```

```
root@babel:~# vmstat 1 99999
procs -----------memory---------- ---swap-- -----io---- -system-- ------cpu-----
 r  b   swpd   free   buff  cache   si   so    bi    bo   in   cs us sy id wa st
 0  0      0  60968  27480 343860    0    0   755  1565  284  875 10  4 85  2  0
 0  0      0  60968  27480 343860    0    0     0     0   32   59  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   26   48  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   24   48  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   23   48  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   25   50  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   26   50  0  0 100  0  0
 0  0      0  60968  27480 343860    0    0     0     0   24   48  0  0 100  0  0
 0  0      0  61000  27480 343860    0    0     0     0   25   48  0  0 100  0  0
 0  0      0  61000  27480 343860    0    0     0     0   25   50  0  0 100  0  0
 0  0      0  61000  27480 343860    0    0     0     0   24   48  0  0 100  0  0
 0  0      0  61000  27480 343860    0    0     0     0   25   50  0  0 100  0  0
 0  0      0  61000  27480 343860    0    0     0     0   23   45  0  1 99   0  0
 0  0      0  61000  27480 343860    0    0     0     0   24   46  0  0 100  0  0
^C
root@babel:~#
```

```
root@babel:~# vmstat -a 1 99999
procs -----------memory---------- ---swap-- -----io---- -system-- ------cpu-----
 r  b   swpd   free  inact active   si   so    bi    bo   in   cs us sy id wa st
 2  0      0  61020 174828 212100    0    0   615  1273  235  719  8  3 88  1  0
 0  0      0  61012 174828 212104    0    0     0     0   22   41  0  0 100  0  0
 0  0      0  61044 174828 212104    0    0     0     0   19   38  0  0 100  0  0
 0  0      0  61044 174828 212104    0    0     0     0   18   38  0  0 100  0  0
 0  0      0  61044 174828 212104    0    0     0     0   22   40  1  1 98   0  0
 0  0      0  61044 174828 212104    0    0     0     0   21   40  0  0 100  0  0
 0  0      0  61044 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  61044 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  61076 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  61076 174828 212104    0    0     0     0   21   40  0  0 100  0  0
 0  0      0  60884 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  60884 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  60884 174828 212104    0    0     0     0   19   34  0  0 100  0  0
 0  0      0  60884 174828 212104    0    0     0     0   21   36  0  1 99   0  0
```

```
root@babel:~# vmstat -d 1 99999
disk- ------------reads------------ ------------writes----------- -----IO------
       total merged sectors    ms  total merged sectors    ms   cur    sec
ram0       0      0       0     0      0      0       0     0     0      0
ram1       0      0       0     0      0      0       0     0     0      0
ram2       0      0       0     0      0      0       0     0     0      0
ram3       0      0       0     0      0      0       0     0     0      0
ram4       0      0       0     0      0      0       0     0     0      0
ram5       0      0       0     0      0      0       0     0     0      0
ram6       0      0       0     0      0      0       0     0     0      0
ram7       0      0       0     0      0      0       0     0     0      0
ram8       0      0       0     0      0      0       0     0     0      0
ram9       0      0       0     0      0      0       0     0     0      0
ram10      0      0       0     0      0      0       0     0     0      0
ram11      0      0       0     0      0      0       0     0     0      0
ram12      0      0       0     0      0      0       0     0     0      0
ram13      0      0       0     0      0      0       0     0     0      0
ram14      0      0       0     0      0      0       0     0     0      0
ram15      0      0       0     0      0      0       0     0     0      0
loop0      0      0       0     0      0      0       0     0     0      0
loop1      0      0       0     0      0      0       0     0     0      0
loop2      0      0       0     0      0      0       0     0     0      0
loop3      0      0       0     0      0      0       0     0     0      0
```

```
root@babel:~# iostat 1 9999
Linux 3.13.0-57-generic (babel)        11/08/2015        _x86_64_        (1 CPU)

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           5.28    0.16    2.24   11.49    0.00   80.84

Device:            tps    kB_read/s    kB_wrtn/s    kB_read    kB_wrtn
vda              33.74       381.72       861.63     425621     960728

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0.99    0.00    0.00    0.00    0.00   99.01

Device:            tps    kB_read/s    kB_wrtn/s    kB_read    kB_wrtn
vda               0.00         0.00         0.00          0          0

avg-cpu:  %user   %nice %system %iowait  %steal   %idle
           0.00    0.00    1.00    0.00    0.00   99.00

Device:            tps    kB_read/s    kB_wrtn/s    kB_read    kB_wrtn
vda               0.00         0.00         0.00          0          0

^C
root@babel:~#
```

```
root@babel:~# sar -u
Linux 3.13.0-57-generic (babel)        11/10/2015        _x86_64_        (1 CPU)

12:00:01 AM     CPU     %user     %nice   %system   %iowait    %steal     %idle
12:05:02 AM     all      0.04      0.00      0.05      0.02      0.00     99.90
12:15:01 AM     all      0.03      0.00      0.03      0.07      0.00     99.87
12:25:01 AM     all      0.02      0.00      0.03      0.04      0.00     99.91
12:35:01 AM     all      0.03      0.00      0.03      0.03      0.00     99.91
12:45:01 AM     all      0.08      0.00      0.08      0.05      0.00     99.80
12:55:01 AM     all      0.06      0.00      0.06      0.00      0.00     99.88
01:05:01 AM     all      0.04      0.00      0.03      0.02      0.00     99.91
01:15:01 AM     all      0.06      0.00      0.06      0.15      0.00     99.73
01:25:01 AM     all      0.03      0.00      0.04      0.00      0.00     99.92
01:35:01 AM     all      0.03      0.00      0.04      0.00      0.00     99.93
01:45:01 AM     all      0.04      0.00      0.04      0.02      0.00     99.90
01:55:01 AM     all      0.04      0.00      0.03      0.00      0.00     99.93
02:05:01 AM     all      0.04      0.00      0.02      0.00      0.00     99.95
02:15:01 AM     all      0.02      0.00      0.03      0.00      0.00     99.95
02:25:01 AM     all      0.04      0.00      0.03      0.00      0.00     99.93
02:35:01 AM     all      0.03      0.00      0.04      0.00      0.00     99.93
02:45:01 AM     all      0.23      0.00      0.19      0.05      0.00     99.54
02:55:01 AM     all      0.38      0.00      0.30      0.25      0.00     99.07
03:05:01 AM     all      0.03      0.00      0.04      0.00      0.00     99.93
```

```
root@babel:~# sar -r
Linux 3.13.0-57-generic (babel)          11/10/2015      _x86_64_        (1 CPU)

12:00:01 AM kbmemfree kbmemused   %memused kbbuffers  kbcached  kbcommit   %commi
t  kbactive    kbinact   kbdirty
12:05:02 AM    145640    356152      70.98     86784    190900     84988      16.9
4    139404    161376         0
12:15:01 AM    145532    356260      71.00     86820    190908     84988      16.9
4    139412    161416         8
12:25:01 AM    145512    356280      71.00     86864    190916     84988      16.9
4    139424    161456         0
12:35:01 AM    145416    356376      71.02     86904    190916     84988      16.9
4    139440    161496         0
12:45:01 AM    143464    358328      71.41     87032    190952     89444      17.8
2    140720    161628        16
12:55:01 AM    145108    356684      71.08     87116    190972     86268      17.1
9    139512    161712         0
01:05:01 AM    145080    356712      71.09     87160    190972     86268      17.1
9    139532    161744        16
01:15:01 AM    144892    356900      71.13     87288    190992     86268      17.1
9    139568    161876         0
01:25:01 AM    144828    356964      71.14     87340    190996     86268      17.1
9    139564    161932         0
root@babel:~# sar -b
Linux 3.13.0-57-generic (babel)          11/10/2015      _x86_64_        (1 CPU)

12:00:01 AM       tps      rtps      wtps   bread/s   bwrtn/s
12:05:02 AM      0.08      0.00      0.08      0.00      1.23
12:15:01 AM      0.05      0.00      0.05      0.00      0.63
12:25:01 AM      0.07      0.00      0.07      0.00      1.05
12:35:01 AM      0.05      0.00      0.05      0.00      0.59
12:45:01 AM      0.11      0.00      0.11      0.00      1.55
12:55:01 AM      0.10      0.00      0.10      0.00      1.49
01:05:01 AM      0.05      0.00      0.05      0.00      0.59
01:15:01 AM      0.13      0.00      0.13      0.00      1.77
01:25:01 AM      0.07      0.00      0.07      0.00      0.93
01:35:01 AM      0.06      0.00      0.06      0.00      0.80
01:45:01 AM      0.07      0.00      0.07      0.00      0.85
01:55:01 AM      0.06      0.00      0.06      0.00      0.87
02:05:01 AM      0.04      0.00      0.04      0.00      0.56
02:15:01 AM      0.05      0.00      0.05      0.00      0.68
02:25:01 AM      0.08      0.00      0.08      0.00      1.16
02:35:01 AM      0.05      0.00      0.05      0.00      0.56
02:45:01 AM      0.17      0.00      0.17      0.00      2.71
02:55:01 AM      0.31      0.00      0.31      0.00      5.14
03:05:01 AM      0.05      0.00      0.05      0.00      0.68
```

```
root@babel:~# ssh-keygen -t rsa -C "My SSH Key"
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
94:8f:6d:48:41:87:d8:40:e5:93:65:1a:a9:58:d2:cc My SSH Key
The key's randomart image is:
+--[ RSA 2048]----+
|      =o*=o+      |
|     . E.+X       |
|      + .O        |
|      . .o *      |
|         S +      |
|          .       |
|                  |
|                  |
|                  |
+-----------------+
root@babel:~#
```

```
root@babel:~# git clone https://github.com/stunthamster/docker_base.git
Cloning into 'docker_base'...
remote: Counting objects: 28, done.
remote: Total 28 (delta 0), reused 0 (delta 0), pack-reused 28
Unpacking objects: 100% (28/28), done.
Checking connectivity... done.
root@babel:~#
```

```
mduffy@babel:~/projects/docker_base$ git remote -v
origin   https://github.com/stunthamster/docker_base.git (fetch)
origin   https://github.com/stunthamster/docker_base.git (push)
```

```
mduffy@babel:~/projects/docker_base$ git push origin master
Enter passphrase for key '/home/mduffy/.ssh/id_rsa':
Counting objects: 5, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 298 bytes | 0 bytes/s, done.
Total 3 (delta 2), reused 0 (delta 0)
To git@github.com:stunthamster/docker_base.git
   f75d776..50470b0  master -> master
```

```
mduffy@babel:~/projects/docker_base$ git merge newbranch
Updating 50470b0..5799d7e
Fast-forward
 README.md | 3 +--
 1 file changed, 1 insertion(+), 2 deletions(-)
```

Chapter 3

```
root@ubuntu:~# aptly mirror create -architectures=amd64 trusty-main http://archi
ve.ubuntu.com/ubuntu/ trusty main
Downloading http://archive.ubuntu.com/ubuntu/dists/trusty/InRelease...
Downloading http://archive.ubuntu.com/ubuntu/dists/trusty/Release...
Downloading http://archive.ubuntu.com/ubuntu/dists/trusty/Release.gpg...
gpgv: Signature made Thu 08 May 2014 15:20:33 BST using DSA key ID 437D05B5
gpgv: Good signature from "Ubuntu Archive Automatic Signing Key <ftpmaster@ubunt
u.com>"
gpgv: Signature made Thu 08 May 2014 15:20:33 BST using RSA key ID C0B21F32
gpgv: Good signature from "Ubuntu Archive Automatic Signing Key (2012) <ftpmaste
r@ubuntu.com>"

Mirror [trusty-main]: http://archive.ubuntu.com/ubuntu/ trusty successfully adde
d.
You can run 'aptly mirror update trusty-main' to download repository contents.
root@ubuntu:~# 
```

Chapter 4
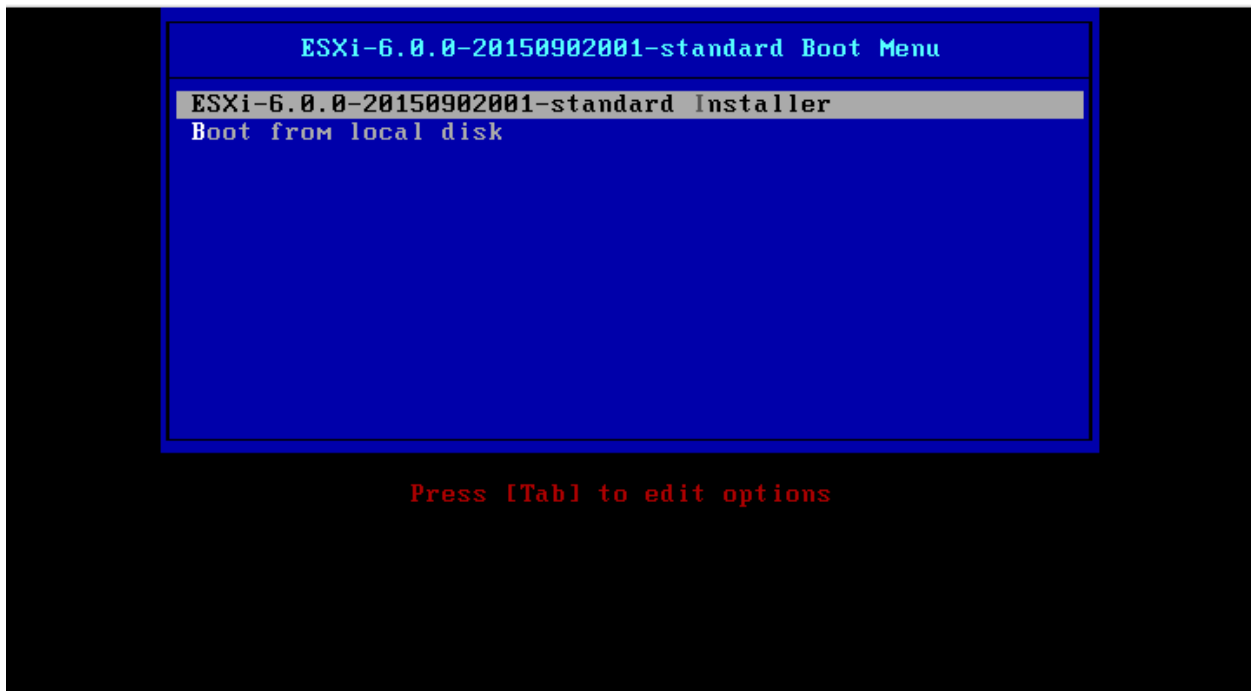
```
              Select a Disk to Install or Upgrade

* Contains a VMFS partition
# Claimed by VMware Virtual SAN (VSAN)

Storage Device                                          Capacity
-----------------------------------------------------------------
Local:
    VMware,  VMware Virtual S (mpx.vmhba1:C0:T0:L0)     40.00 GiB
Remote:
    (none)



    (Esc) Cancel      (F1) Details     (F5) Refresh    (Enter) Continue
```

```
                    Installation Complete

ESXi 6.0.0 has been successfully installed.

ESXi 6.0.0 will operate in evaluation mode for 60 days. To
use ESXi 6.0.0 after the evaluation period, you must
register for a VMware product license. To administer your
server, use the vSphere Client or the Direct Control User
Interface.

Remove the installation disc before rebooting.

Reboot the server to start using ESXi 6.0.0.

                    (Enter) Reboot
```

```
VMware ESXi 6.0.0 (VMKernel Release Build 3029758)

VMware, Inc. VMware Virtual Platform

2 x Intel(R) Xeon(R) CPU E5-2697 v2 @ 2.70GHz
4 GiB Memory
```

```
Download tools to manage this host from:
http://192.168.152.134/ (DHCP)
http://[fe80::20c:29ff:fe79:b751]/ (STATIC)
```

VMware ESXi
Welcome

Getting Started

If you need to access this host remotely, use the following program to install vSphere Client software. After running the installer, start the client and log in to this host.

Please note that the traditional vSphere Client does not support features added to vSphere in the 5.1 and 5.5 releases. The traditional vSphere Client is intended for use if you need to connect directly to an ESXi host, are performing certain vSphere Update Manager operations, or are running vCenter Plug-ins that support only the vSphere Client such as vCenter Site Recovery Manager or vCenter Multi-Hypervisor Manager.

You can take advantage of the fullest range of functionality introduced or updated in this release by using the vSphere Web Client.

• Download vSphere Client

To streamline your IT operations with vSphere, use the following program to install vCenter. vCenter will help you consolidate and optimize workload distribution across ESX hosts, reduce new system deployment time from weeks to seconds, monitor your virtual

For Administrators

vSphere Remote Command Line

The Remote Command Line allows you to use command line tools to manage vSphere from a client machine. These tools can be used in shell scripts to automate day-to-day operations.

• Download the Virtual Appliance
• Download the Windows Installer (exe)
• Download the Linux Installer (tar.gz)

Web-Based Datastore Browser

Use your web browser to find and download files (for example, virtual machine and virtual disk files).

• Browse datastores in this host's inventory

For Developers

vSphere Web Services SDK

Learn about our latest SDKs, Toolkits, and

VMware vSphere Client

vmware

VMware vSphere™
Client

In vSphere 5.5, all new vSphere features are available only through the vSphere Web Client. The traditional vSphere Client will continue to operate, supporting the same feature set as vSphere 5.0, but not exposing any of the new features in vSphere 5.5.

The vSphere Client is still used for the vSphere Update Manager (VUM) and Host Client, along with a few solutions (e.g. Site Recovery Manager).

To directly manage a single host, enter the IP address or host name. To manage multiple hosts, enter the IP address or name of a vCenter Server.

IP address / Name: `10.0.1.21`

User name:

Password:

☐ Use Windows session credentials

[Login]   [Close]   [Help]

```
System Customization                    Configure Password

Configure Password                      Set
Configure Lockdown Mode
                                        To prevent unauthorized access to this system, set the
Configure Management Network            password for the user.
Restart Management Network
Test Management Network
Network Restore Options

Configure Keyboard
Troubleshooting Options

View System Logs

View Support Information

Reset System Configuration










                                        <Enter> Change                           <Esc> Log Out
                    VMware ESXi 6.0.0 (VMKernel Release Build 2494585)
```

```
Troubleshooting Mode Options                    ESXi Shell

 Enable ESXi Shell                              ESXi Shell is Disabled
 Enable SSH
 Modify ESXi Shell and SSH timeouts             Change current state of the ESXi Shell
 Modify DCUI idle timeout
 Restart Management Agents


















                                               <Enter> Change                    <Esc> Exit
                    VMware ESXi 6.0.0 (VMKernel Release Build 2494585)
```

```
Last login: Mon Mar 16 14:56:44 on ttys002
macbookpro:~ mduffy$ ssh root@192.168.17.136
Password:
The time and date of this login have been sent to the system logs.

VMware offers supported, powerful system administration tools.  Please
see www.vmware.com/go/sysadmintools for details.

The ESXi Shell can be disabled by an administrative user. See the
vSphere Security documentation for more information.
[root@localhost:~] ▯
```

```
[root@localhost:~] vim-cmd vmsvc/getallvms
Vmid    Name                    File                    Guest OS        Version   Annotation
1       examplevm   [datastore1] examplevm_1/examplevm_1.vmx   ubuntu64Guest   vmx-10
2       examplevm   [datastore1] examplevm/examplevm.vmx       ubuntu64Guest   vmx-10
[root@localhost:~] ▯
```

```
[root@localhost:~] esxcli vm process list
examplevm
    World ID: 61897
    Process ID: 0
    VMX Cartel ID: 61896
    UUID: 56 4d c9 26 42 dd d3 91-53 1d a7 b2 a2 a3 25 0c
    Display Name: examplevm
    Config File: /vmfs/volumes/5506ea1b-d924ec1b-595e-000c2954f195/examplevm/exam
plevm.vmx
[root@localhost:~]
```

```
(vim.vm.SnapshotInfo) {
   currentSnapshot = 'vim.vm.Snapshot:2-snapshot-1',
   rootSnapshotList = (vim.vm.SnapshotTree) [
      (vim.vm.SnapshotTree) {
         snapshot = 'vim.vm.Snapshot:2-snapshot-1',
         vm = 'vim.VirtualMachine:2',
         name = "awesomework",
         description = "",
         id = 1,
         createTime = "2015-03-17T03:22:09.622103Z",
         state = "poweredOn",
         quiesced = false,
         backupManifest = <unset>,
         replaySupported = false,
      }
   ]
}
[root@localhost:~]
```

```
changed: [172.16.84.128] => (item={'key': 'admin', 'value': {'comment': 'Administrator User', 'state
': 'present', 'shell': '/bin/bash', 'uid': 5110, 'gid': 5110, 'password': '$6$5HIi7W8lR.Flg$DWIvV6B/
OGgsiQUtMxfmaP4CkX6fu/t4DplUH3EZL1N5prbSau5soD15P70YPmDsH4Puon8vDnkblfO0745iT/', 'sshkey': 'ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDd/nW7kP+evZOgrc9RklZw6UsiOd/cTs9qLTitk2p3LIGbw4sjlcSLMxd57DPN+J9j+ksv
pZf93lCe0pTW1Fe9H+TNVOjAqX3bXCMFpguEDZY7FjwEQzPdpYw//xxIpCJnQ2MIYtYVaede3zCUifz+cCJaHAuHSxZjhAX5vjVl
srEY5vHvaH+OcNyHzXBQFrOTDh475bFIZv6NMiPs9g3zVi72829lBFluPqWGc0AmfzxMTs6m0AZYaxIPES0RNIy4GvVR0EUaY0TW
JvMV+OI2ISGSrfvthWabL+6hPbqtK8vR70JAy12K21d3DdAWVlkVLUjx7eIfflTfhbuN6pWF'}})
changed: [172.16.84.128] => (item={'key': 'testuser', 'value': {'state': 'present', 'shell': '/bin/b
ash', 'uid': 510, 'gid': 510, 'password': '$6$5HIi7W8lR.Flg$DWIvV6B/OGgsiQUtMxfmaP4CkX6fu/t4DplUH3EZ
L1N5prbSau5soD15P70YPmDsH4Puon8vDnkblfO0745iT/', 'comments': 'Example User', 'sshkey': 'ssh-rsa AAAA
B3NzaC1yc2EAAAADAQABAAABAQDd/nW7kP+evZOgrc9RklZw6UsiOd/cTs9qLTitk2p3LIGbw4sjlcSLMxd57DPN+J9j+ksvpZf9
3lCe0pTW1Fe9H+TNVOjAqX3bXCMFpguEDZY7FjwEQzPdpYw//xxIpCJnQ2MIYtYVaede3zCUifz+cCJaHAuHSxZjhAX5vjVlsrEY
5vHvaH+OcNyHzXBQFrOTDh475bFIZv6NMiPs9g3zVi72829lBFluPqWGc0AmfzxMTs6m0AZYaxIPES0RNIy4GvVR0EUaY0TWJvMV
+OI2ISGSrfvthWabL+6hPbqtK8vR70JAy12K21d3DdAWVlkVLUjx7eIfflTfhbuN6pWF'}})

TASK: [common | Add Keys] **********************************************
changed: [172.16.84.128] => (item={'key': 'admin', 'value': {'comment': 'Administrator User', 'state
': 'present', 'shell': '/bin/bash', 'uid': 5110, 'gid': 5110, 'password': '$6$5HIi7W8lR.Flg$DWIvV6B/
OGgsiQUtMxfmaP4CkX6fu/t4DplUH3EZL1N5prbSau5soD15P70YPmDsH4Puon8vDnkblfO0745iT/', 'sshkey': 'ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDd/nW7kP+evZOgrc9RklZw6UsiOd/cTs9qLTitk2p3LIGbw4sjlcSLMxd57DPN+J9j+ksv
pZf93lCe0pTW1Fe9H+TNVOjAqX3bXCMFpguEDZY7FjwEQzPdpYw//xxIpCJnQ2MIYtYVaede3zCUifz+cCJaHAuHSxZjhAX5vjVl
srEY5vHvaH+OcNyHzXBQFrOTDh475bFIZv6NMiPs9g3zVi72829lBFluPqWGc0AmfzxMTs6m0AZYaxIPES0RNIy4GvVR0EUaY0TW
JvMV+OI2ISGSrfvthWabL+6hPbqtK8vR70JAy12K21d3DdAWVlkVLUjx7eIfflTfhbuN6pWF'}})
changed: [172.16.84.128] => (item={'key': 'testuser', 'value': {'state': 'present', 'shell': '/bin/b
ash', 'uid': 510, 'gid': 510, 'password': '$6$5HIi7W8lR.Flg$DWIvV6B/OGgsiQUtMxfmaP4CkX6fu/t4DplUH3EZ
L1N5prbSau5soD15P70YPmDsH4Puon8vDnkblfO0745iT/', 'comments': 'Example User', 'sshkey': 'ssh-rsa AAAA
B3NzaC1yc2EAAAADAQABAAABAQDd/nW7kP+evZOgrc9RklZw6UsiOd/cTs9qLTitk2p3LIGbw4sjlcSLMxd57DPN+J9j+ksvpZf9
3lCe0pTW1Fe9H+TNVOjAqX3bXCMFpguEDZY7FjwEQzPdpYw//xxIpCJnQ2MIYtYVaede3zCUifz+cCJaHAuHSxZjhAX5vjVlsrEY
5vHvaH+OcNyHzXBQFrOTDh475bFIZv6NMiPs9g3zVi72829lBFluPqWGc0AmfzxMTs6m0AZYaxIPES0RNIy4GvVR0EUaY0TWJvMV
+OI2ISGSrfvthWabL+6hPbqtK8vR70JAy12K21d3DdAWVlkVLUjx7eIfflTfhbuN6pWF'}})

TASK: [common | Install Common packages] ***********************************
changed: [172.16.84.128] => (item=sysstat,open-vm-tools)

PLAY RECAP ***********************************************************
172.16.84.128                : ok=4    changed=3    unreachable=0    failed=0

MacBookPro:first_playbook mduffy$ 
```

```
': 'present', 'server_name': 'test2.test.com'}})

TASK: [nginx | Add Virtual Hosts] ********************************
*******
changed: [172.16.84.128] => (item={'key': 'test1', 'value': {'vhost_root
': 'present', 'server_name': 'test.test.com'}})
changed: [172.16.84.128] => (item={'key': 'test2', 'value': {'vhost_root
': 'present', 'server_name': 'test2.test.com'}})

TASK: [nginx | Add Virtual Host symlink] *************************
*******
changed: [172.16.84.128] => (item={'key': 'test1', 'value': {'vhost_root
': 'present', 'server_name': 'test.test.com'}})
changed: [172.16.84.128] => (item={'key': 'test2', 'value': {'vhost_root
': 'present', 'server_name': 'test2.test.com'}})

NOTIFIED: [nginx | restart nginx] *******************************
*******
changed: [172.16.84.128]

PLAY RECAP ******************************************************
*******
172.16.84.128              : ok=13   changed=11   unreachable=0   faile
d=0
```

```
Alita:devops_cookbook mduffy$ serverspec-init
Select OS type:

  1) UN*X
  2) Windows

Select number: 1

Select a backend type:

  1) SSH
  2) Exec (local)

Select number: 1

Vagrant instance y/n: n
Input target host name: test.example.com
 + spec/
 + spec/test.example.com/
 + spec/test.example.com/sample_spec.rb
 + spec/spec_helper.rb
 + Rakefile
 + .rspec
```

```
Finished in 0.10308 seconds (files took 2.98 seconds to load)
5 examples, 5 failures

Failed examples:

rspec ./spec/test.stunthamster.com/nginx_role_spec.rb:5 # Package "nginx" should be installe
d
rspec ./spec/test.stunthamster.com/nginx_role_spec.rb:9 # Service "nginx" should be enabled
rspec ./spec/test.stunthamster.com/nginx_role_spec.rb:13 # Port "80" should be listening
rspec ./spec/test.stunthamster.com/nginx_role_spec.rb:20 # File "/etc/nginx/sites-enabled/te
st1.conf" should be linked to "/etc/nginx/sites-available/test1.conf"
rspec ./spec/test.stunthamster.com/nginx_role_spec.rb:20 # File "/etc/nginx/sites-enabled/te
st2.conf" should be linked to "/etc/nginx/sites-available/test2.conf"
```

```
Package "nginx"
  should be installed

Service "nginx"
  should be enabled

Port "80"
  should be listening

File "/etc/nginx/sites-enabled/test1.conf"
  should be linked to "/etc/nginx/sites-available/test1.conf"

File "/etc/nginx/sites-enabled/test2.conf"
  should be linked to "/etc/nginx/sites-available/test2.conf"

Finished in 0.10165 seconds (files took 5.71 seconds to load)
5 examples, 0 failures
```

Chapter 6

```
mduffy — mduffy@Alita: ~ — ~ — zsh — 48×16

➜  ~  docker -v
Docker version 1.6.0, build 4749651
➜  ~
```

```
mduffy — mduffy@Alita: ~ — ~ — zsh — 82×22

➜  ~  docker ps
CONTAINER ID        IMAGE              COMMAND               CREATED
 STATUS              PORTS              NAMES
296c18cc81ca        mysql:latest       "/entrypoint.sh mysq   10 days ago
 Up 2 seconds         3306/tcp           test-mysql
```

10.0.1.117/wp-admin/install.php

Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Don't worry, you can always change these settings later.

Site Title

Username

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password, twice

A password will be automatically generated for you if you leave this blank.

Strength indicator

Hint: The password should be at least seven characters long. To make it stronger, use upper and lower case letters, numbers, and symbols like ! " ? $ % ^ &).

---

mduffy — mduffy@Alita: ~ — ~ — zsh — 96×16

```
➜  ~  docker images
REPOSITORY          TAG            IMAGE ID            CREATED             VIRTUAL SIZE
wordpress           latest         7dc926dab9fb        2 weeks ago         460.3 MB
mysql               latest         56f320bd6adc        3 weeks ago         282.9 MB
➜  ~
```

```
➜  gollum  docker build --no-cache -t stunthamster/gollum:4.0.0 .
Sending build context to Docker daemon 43.52 kB
Sending build context to Docker daemon
Step 0 : FROM ubuntu:14.04
14.04: Pulling from ubuntu
e9e06b06e14c: Pull complete
a82efea989f9: Pull complete
37bea4ee0c81: Pull complete
07f8e8c5e660: Already exists
ubuntu:14.04: The image you are pulling has been verified. Important: image verification is a te
ch preview feature and should not be relied on to provide security.
Digest: sha256:125f9479befe1f71562b6ff20fb301523a2633902ded6d50ade4ebcd7637a035
Status: Downloaded newer image for ubuntu:14.04
 ---> 07f8e8c5e660
Step 1 : MAINTAINER Michael Duffy <michael@stunthamster.com>
 ---> Running in 0126728037c6
 ---> 336fb4837b48
Removing intermediate container 0126728037c6
Step 2 : RUN apt-get update
 ---> Running in a8d91d6643a3
Ign http://archive.ubuntu.com trusty InRelease
Ign http://archive.ubuntu.com trusty-updates InRelease
Ign http://archive.ubuntu.com trusty-security InRelease
Hit http://archive.ubuntu.com trusty Release.gpg
Get:1 http://archive.ubuntu.com trusty-updates Release.gpg [933 B]
Get:2 http://archive.ubuntu.com trusty-security Release.gpg [933 B]
Hit http://archive.ubuntu.com trusty Release
Get:3 http://archive.ubuntu.com trusty-updates Release [63.5 kB]
Get:4 http://archive.ubuntu.com trusty-security Release [63.5 kB]
Get:5 http://archive.ubuntu.com trusty/main Sources [1335 kB]
Get:6 http://archive.ubuntu.com trusty/restricted Sources [5335 B]
Get:7 http://archive.ubuntu.com trusty/universe Sources [7926 kB]
Get:8 http://archive.ubuntu.com trusty/main amd64 Packages [1743 kB]
```

Create New Page

Home

NOTE: This page will be created within the "/" directory

| B | *i* | {} | ☰ | ☷ | 66 | HR | h1 | h2 | h3 | 🔗 | 🗇 | ? |

Edit Mode: **Markdown** ▼

Created Home (markdown)

Save   Preview

```
distribution-2.0.0 — openssl req -newkey rsa:2048 -nodes -keyout certs/registery.key -x509 -days — openssl — openssl — 96×34

→ distribution-2.0.0  openssl req -newkey rsa:2048 -nodes -keyout certs/registery.key -x509 -da
ys 730 -out certs/registery.crt
Generating a 2048 bit RSA private key
..........................+++
...................................+++
writing new private key to 'certs/registery.key'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:
```

`{}`

distribution-2.0.0 — mduffy@alita: ~/Downloads/distribution-2.0.0 — ..ibution-2.0.0 — zsh — 83×26
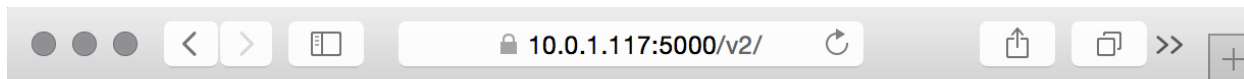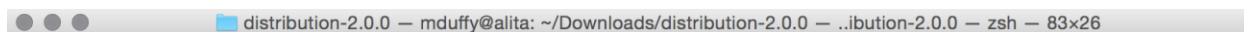
```
➜  distribution-2.0.0  docker push registry.stunthamster.com:5000/gollum:4.0.0
The push refers to a repository [registry.stunthamster.com:5000/gollum] (len: 1)
bffb8c4a03ea: Image already exists
99d63ab110f9: Image successfully pushed
7b9ee66207cb: Image successfully pushed
2e971bf03a20: Image successfully pushed
57a21dbeb512: Image successfully pushed
393b01244176: Image successfully pushed
71dae6be4417: Image successfully pushed
bd1eaf07f014: Image successfully pushed
ca0f230b927e: Image successfully pushed
f1bec3d7a3c2: Image successfully pushed
4a386c8c854d: Image successfully pushed
2c006467b059: Image successfully pushed
cf87a463dca8: Image successfully pushed
33e1becc4d89: Image successfully pushed
86c1ba2f46fd: Image successfully pushed
f3d5a2ae5530: Image successfully pushed
e3dfcb7c6e5a: Image successfully pushed
c032a945ed19: Image successfully pushed
05bacbdfa6eb: Image successfully pushed
e66a33f451f4: Image successfully pushed
41b730702607: Image successfully pushed
3cb35ae859e7: Image successfully pushed
Digest: sha256:433e2671bc64abc9561f916b166e37076fa851a8eb42670ad7f29591f6e21222
➜  distribution-2.0.0  ▯
```

```
➜  distribution-2.0.0   curl -v -X GET http://registry.stunthamster.com:5000/v2/gollum/tags/list
* Hostname was NOT found in DNS cache
*    Trying 172.16.84.135...
* Connected to registry.stunthamster.com (172.16.84.135) port 5000 (#0)
> GET /v2/gollum/tags/list HTTP/1.1
> User-Agent: curl/7.37.1
> Host: registry.stunthamster.com:5000
> Accept: */*
>
< HTTP/1.1 200 OK
< Content-Type: application/json; charset=utf-8
< Docker-Distribution-Api-Version: registry/2.0
< Date: Fri, 15 May 2015 04:54:59 GMT
< Content-Length: 35
<
{"name":"gollum","tags":["4.0.0"]}
* Connection #0 to host registry.stunthamster.com left intact
➜  distribution-2.0.0
```

Jenkins

Jenkins ▸

🗃 New Item

👥 People

📝 Build History

🔧 Manage Jenkins

🔑 Credentials

Welcome to Jenkins!

Please **create new jobs** to get started.

Build Queue —

No builds in the queue.

Build Executor Status —

1 Idle

2 Idle

🔧 Manage Jenkins

Manage Jenkins

⚠ **Unsecured Jenkins allows anyone on the network to launch processes on your behalf. Consider at least enabling authentication to discourage misuse.**

Setup Security   **Dismiss**

🔒 Configure Global Security

☐ Enable security ❓

Markup Formatter | Escaped HTML   ⬍ |

Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.

☐ Prevent Cross Site Request Forgery exploits ❓

　　☐ Use browser for metadata download ❓

Save　　Apply

Page generated: May 31, 2015 6:38:45 PM   REST API   Jenkins ver. 1.615

🔒 Configure Global Security

☑ Enable security ❓

TCP port for JNLP slave agents ○ Fixed : [⇕] ● Random ○ Disable ❓

Disable remember me ☐ ❓

Access Control

Security Realm

○ Delegate to servlet container ❓

● Jenkins' own user database ❓

    ☐ Allow users to sign up ❓

○ LDAP

○ Unix user/group database ❓

Authorization

○ Anyone can do anything ❓

○ Legacy mode ❓

● Logged-in users can do anything ❓

○ Matrix-based security ❓

○ Project-based Matrix Authorization Strategy ❓

Markup Formatter

[Escaped HTML   ⇕]

Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.

☐ Prevent Cross Site Request Forgery exploits ❓

    ☐ Use browser for metadata download ❓

Save Apply

Manage Users
Create/delete/modify users that can log in to this Jenkins

Sign up

Username: admin

Password: ·········

Confirm password: ·········

Full name: Admin User

E-mail address: admin@example.com

Sign up

Filter: 🔍 git plugin

| Updates | **Available** | Installed | Advanced |

Install ↓	Name	Version
☐	**Git Plugin** This plugin allows use of Git as a build SCM. A recent Git runtime is required (1.7.9 minimum, 1.8.x recommended). Plugin is only tested on official git client. Use exotic installations at your own risks.	2.3.5
☐	**Git Chooser Alternative Plugin** An alternative build chooser plugin for the Jenkins git plugin.	1.1
☐	**Git Parameter Plugin** This plugin allows you to choose between Git tags or sha1 of your SCM repository so Git Plugin installed is required.	0.4.0
☐	**Team Concert Git Plugin** Integrates Jenkins with Rational Team Concert for Jenkins Builds which use Git as source control. This plugin will create traceability links from a Jenkins build to Rational Team Concert Work Items and build results. This plugin adds traceability links from a Jenkins build to an RTC build result. It also publishes links to work items and annotates the change log generated by Jenkins with links to RTC Work Items; It leverages the current RTC features and workflows that users are already familiar with such as, emails, toaster popups, reporting, dashboards, etc.	1.0.9
☐	**Tracking Git Plugin** Lets one project track the Git revisions that are built for another project.	1.0

| Install without restart | Download now and install after restart | Update information obtained: 30 min ago | Check now |

```
                     🏠 mduffy — root@jenkins: ~ — ssh — 80×24
jenkins@jenkins:/root$ ssh-keygen -t rsa -b 4096 -C "jenkins@example.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/var/lib/jenkins/.ssh/id_rsa):
Created directory '/var/lib/jenkins/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /var/lib/jenkins/.ssh/id_rsa.
Your public key has been saved in /var/lib/jenkins/.ssh/id_rsa.pub.
The key fingerprint is:
74:fc:26:67:bf:0c:46:d9:96:3f:54:1f:bc:d9:db:38 jenkins@example.com
The key's randomart image is:
+--[ RSA 4096]----+
|                 |
|        .    .   |
|       . o     o.|
|      . . . o .B|
|       S . B ++o|
|          * o.oo|
|           o Eoo|
|          . o o.|
|             o  |
+-----------------+
jenkins@jenkins:/root$ ▯
```

🔑 Credentials

Domain	Description
🏰 Global credentials (unrestricted)	Credentials that should be available irrespective of domain specification to requirements matching.

Icon: S M L

search

⬆ Back to credential domains

🔑 Add Credentials

Kind   SSH Username with private key

Scope   Global (Jenkins, nodes, items, all child items, etc)

Username   git

Private Key   ○ Enter directly
               ○ From a file on Jenkins master
               ● From the Jenkins master ~/.ssh

Passphrase

Description

Advanced...

OK

Jenkins

Jenkins   ▸

📦 **New Item**

👥 People

📝 Build History

🛠 Manage Jenkins

🔑 Credentials

👥 My Views

Welcome to Jenkins!

Please **create new jobs** to get started.

Jenkins

search　🔵　**Admin User**　| log out

Jenkins ▸ test_project ▸ configuration

🔼 Back to Dashboard

🔍 Status

📝 Changes

📁 Workspace

▶️ Build Now

🚫 Delete Project

🔧 **Configure**

📚 **Build History**　　　　trend ▬

🔵	#11	Jun 4, 2015 5:06 PM
🔴	#10	Jun 4, 2015 5:06 PM
🔵	#9	Jun 4, 2015 5:05 PM
🔵	#8	Jun 4, 2015 5:02 PM
🔴	#7	Jun 4, 2015 5:02 PM
🔵	#6	Jun 4, 2015 5:00 PM

📶 RSS for all 📶 RSS for failures

Project name　[test_project]

Description

[This job fetches and builds a Blog based on the Hugo CMS.]

[Escaped HTML] Preview

☑ Discard Old Builds

Strategy　[Log Rotation ▾]

Days to keep builds　[　　　　　　　　　　　　]

if not empty, build records are only kept up to this number of days

Max # of builds to keep　[5]

if not empty, only up to this number of build records are kept

[Advanced...]

GitHub project　[　　　　　　　　　　　　　　　　　]

☐ This build is parameterized

☐ Disable Build (No new builds will be executed until the project is re-enabled.)

☐ Execute concurrent builds if necessary

Advanced Project Options

[Advanced...]

[Save]　[Apply]

Build

 Execute shell   ?

Command | hugo

See the list of available environment variables

Delete

Add build step ▾

Post-build Actions

 Archive the artifacts   ?

Files to archive | public/**   ?

Advanced...

Delete

Add post-build action ▾

Save   Apply

☀ **Build History**   **trend** —

🔵 **#13**   Jun 4, 2015 5:34 PM

🔵 **#12**   Jun 4, 2015 5:34 PM

🔵 **#11**   Jun 4, 2015 5:06 PM

🔴 **#10**   Jun 4, 2015 5:06 PM

🔵 **#9**   Jun 4, 2015 5:05 PM

🔵 **#8**   Jun 4, 2015 5:02 PM

📶 RSS for all 📶 RSS for failures

Execute shell

Command
```
hugo -s files/hugo/
```

See the list of available environment variables

Delete

Execute shell

Command
```
docker build -t stunthamster/blog:latest .
```

See the list of available environment variables

Delete

Execute shell

Command
```
docker push stunthamster/blog:latest
```

See the list of available environment variables

Delete

🔵 Console Output

```
Started by user Admin User
Building in workspace /var/lib/jenkins/jobs/test_project/workspace
 > git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
 > git config remote.origin.url git@github.com:stunthamster/stunthamster_blog.git # timeout=10
Cleaning workspace
 > git rev-parse --verify HEAD # timeout=10
Resetting working tree
 > git reset --hard # timeout=10
 > git clean -fdx # timeout=10
Fetching upstream changes from git@github.com:stunthamster/stunthamster_blog.git
 > git --version # timeout=10
using GIT_SSH to set credentials
```

```
da7142e65a7c: Buffering to Disk
da7142e65a7c: Image successfully pushed
407d8dcbfcaf: Buffering to Disk
407d8dcbfcaf: Image successfully pushed
d1078fde300d: Buffering to Disk
d1078fde300d: Image successfully pushed
9dab3f34d9be: Buffering to Disk
9dab3f34d9be: Image successfully pushed
cd033ab9d10d: Buffering to Disk
cd033ab9d10d: Image successfully pushed
fa81ed084842: Buffering to Disk
fa81ed084842: Image successfully pushed
e04c66a223c4: Buffering to Disk
e04c66a223c4: Image successfully pushed
7e2c5c55ef2c: Buffering to Disk
7e2c5c55ef2c: Image successfully pushed
e118faab2e16: Buffering to Disk
e118faab2e16: Image successfully pushed
Digest: sha256:2ce464bb252802ebd063ee0ee27fbce6e364f3a8876afef6f4867dc949cd6a20
Finished: SUCCESS
```

Project name	tomcat_test
Description	Test of Tomcat parallel builds

[Escaped HTML] Preview

☑ Discard Old Builds   ⑦

Strategy   Log Rotation ⇕

Days to keep builds

if not empty, build records are only kept up to this number of days

Max # of builds to keep   10

if not empty, only up to this number of build records are kept

Days to keep artifacts

if not empty, artifacts from builds older than this number of days will be deleted, but the logs, history, reports, etc for the build will be kept

Max # of builds to keep with artifacts

if not empty, only up to this number of builds have their artifacts retained

☐ This build is parameterized   ⑦

☐ Disable Build (No new builds will be executed until the project is re-enabled.)   ⑦

☐ Execute concurrent builds if necessary   ⑦

Source Code Management

- ○ None
- ○ CVS
- ○ CVS Projectset
- ● Git
  - Repositories
    - Repository URL `git@github.com:stunthamster/tomcat_deploy_test.git`
    - Credentials `git` ⇕ 🔑 Add

      Advanced...

      Add Repository   Delete Repository

  - Branches to build
    - Branch Specifier (blank for 'any') `*/master`

      Add Branch   Delete Branch

  - Repository browser `(Auto)`

  - Additional Behaviours
    - ▦ **Clean before checkout**

      Delete

      Add ▾

Build Triggers

- ☐ Trigger builds remotely (e.g., from scripts)
- ☐ Build after other projects are built
- ☐ Build periodically
- ☑ Poll SCM
  - Schedule
    ```
    * * * * *
    ```
    ⚠ **Do you really mean "every minute" when you say "* * * * *"? Perhaps you meant "H * * * *" to poll once per hour**
- Ignore post-commit hooks ☐

Execute shell ⊙

Command
```
mv chapter7/testapp/* . && jar cf testapp.war WEB-INF/ index.jsp
```

See the list of available environment variables

Delete

Execute shell ⊙

Command
```
echo "buildnum: $BUILD_NUMBER" > chapter7/appdeploy/group_vars/appdeploy/main.yml
```

See the list of available environment variables

Delete

Execute shell ⊙

Command
```
ansible-playbook -i chapter7/appdeploy/inventory/appinventory chapter7/appdeploy/appdeploy.yml
```

See the list of available environment variables

Delete

🔵 Console Output

```
Started by user Admin User
Building in workspace /var/lib/jenkins/jobs/tomcat_test/workspace
 > git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
 > git config remote.origin.url git@github.com:stunthamster/devopscoobookcode.git # timeout=10
Cleaning workspace
 > git rev-parse --verify HEAD # timeout=10
Resetting working tree
 > git reset --hard # timeout=10
 > git clean -fdx # timeout=10
Fetching upstream changes from git@github.com:stunthamster/devopscoobookcode.git
 > git --version # timeout=10
using GIT_SSH to set credentials
 > git -c core.askpass=true fetch --tags --progress git@github.com:stunthamster/devopscoobookcode.git
+refs/heads/*:refs/remotes/origin/*
 > git rev-parse refs/remotes/origin/master^{commit} # timeout=10
 > git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 685fe50706917391fbb7e3add6536dfee8aa6b47 (refs/remotes/origin/master)
 > git config core.sparsecheckout # timeout=10
 > git checkout -f 685fe50706917391fbb7e3add6536dfee8aa6b47
 > git rev-list 685fe50706917391fbb7e3add6536dfee8aa6b47 # timeout=10
[workspace] $ /bin/sh -xe /tmp/hudson29384041333671404.sh
+ mv chapter7/testapp/WEB-INF chapter7/testapp/index.jsp .
+ jar cf testapp.war WEB-INF/ index.jsp
[workspace] $ /bin/sh -xe /tmp/hudson82270327239407682.sh
+ echo buildnum: 36
[workspace] $ /bin/sh -xe /tmp/hudson5436740567623696210.sh
+ ansible-playbook -i chapter7/appdeploy/inventory/appinventory chapter7/appdeploy/appdeploy.yml

PLAY [appdeploy] ********************************************************

TASK: [Deploy App] ****************************************************
changed: [46.101.4.34]

PLAY RECAP ************************************************************
46.101.4.34                : ok=1    changed=1    unreachable=0    failed=0

Archiving artifacts
Finished: SUCCESS
```

46.101.4.34:8080/testapp/

Test App

Greetings, this is the first version of our test app. The time is currently: Tue Jun 09 23:16:37 UTC 2015

Test App

Greetings, this is the first version of our test app. The time is currently: Tue Jun 09 23:28:10 UTC 2015

---

http://46.101.4.34:8080/testapp/

46.101.4.34:8080/testapp/

Test App

Greetings, this is the second version of our test app.

The time is currently: Tue Jun 09 23:28:11 UTC 2015

⠿ Username with password

Scope   Global (Jenkins, nodes, items, all child items, etc)   ▲▼ ⑦

Username   jenkins   ⑦

Password   •••••••••••••••••••••••••••••   ⑦

Description Jenkins Slave   ⑦

Advanced...

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time	
🖥	master	Linux (amd64)	In sync	51.87 GB	⛔ 0 B	51.87 GB	0ms	🔧
	Data obtained	17 sec	17 sec	17 sec	17 sec	17 sec	17 sec	

Refresh status

Node name `slave1`

◉ **Dumb Slave**

Adds a plain, dumb slave to Jenkins. This is called "dumb" because Jenkins doesn't provide higher level of integration with these slaves, such as dynamic provisioning. Select this type if no other slave types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

OK

Name	`slave1`	?
Description	`First Of many nodes`	?
# of executors	`1`	?
Remote root directory	`/home/jenkins`	?
Labels	`test docker`	?
Usage	`Utilize this node as much as possible`	?
Launch method	`Launch slave agents on Unix machines via SSH`	?

Host `slave.example.com`

Credentials `jenkins/****** (Jenkins Slave)` 🔑 Add ?

Advanced...

Availability `Keep this slave on-line as much as possible` ?

S	Name ↓	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time	
🖥	slave1	Linux (amd64)	In sync	25.86 GB	⛔ 0 B	25.86 GB	2535ms	🔧
🖥	master	Linux (amd64)	In sync	51.87 GB	⛔ 0 B	51.87 GB	0ms	🔧
	Data obtained	3 min 11 sec	3 min 11 sec	3 min 11 sec	3 min 11 sec	3 min 11 sec	3 min 11 sec	

Refresh status

Execute shell

Command
```
docker rm $(docker ps -a -q) && docker rmi $(docker images -q)
```

See the list of available environment variables

Delete

Source Code Management

○ None
○ CVS
○ CVS Projectset
◉ Git

Repositories

Repository URL `git@github.com:stunthamster/stunthamster_blog.git`

Credentials `git` ▾ 🔑 Add

Advanced...

Add Repository   Delete Repository

Branches to build

Branch Specifier (blank for 'any') `*/master`

Add Branch   Delete Branch

Repository browser (Auto)

Additional Behaviours Add ▾

○ Subversion

Build Triggers

☐ Trigger builds remotely (e.g., from scripts)
☐ Build after other projects are built
☐ Build periodically
☐ Build when a change is pushed to GitHub
☑ Poll SCM

Schedule

```
H * * * *
```

Would last have run at Thursday, June 4, 2015 5:00:19 PM EDT; would next run at Thursday, June 4, 2015 6:00:19 PM EDT.

databases

name
_internal
test1

Query:

Query Templates ▾

Query: SHOW MEASUREMENTS

Query Templates ▾

measurements

name
cpu_busy
cpu_guest
cpu_guestNice
cpu_idle
cpu_iowait
cpu_irq

Query: SELECT * FROM cpu_busy WHERE cpu = 'cpu0'

Query Templates ▾

cpu_busy

time	cpu	host	value
2015-09-16T21:25:54Z	"cpu0"	"influxdb1"	486.2
2015-09-16T21:26:04Z	"cpu0"	"influxdb1"	486.39000000000004
2015-09-16T21:26:14Z	"cpu0"	"influxdb1"	486.45
2015-09-16T21:26:24Z	"cpu0"	"influxdb1"	486.50999999999993
2015-09-16T21:26:34Z	"cpu0"	"influxdb1"	486.65999999999997
2015-09-16T21:26:44Z	"cpu0"	"influxdb1"	486.72999999999996
2015-09-16T21:26:54Z	"cpu0"	"influxdb1"	486.83000000000004

Query: `SELECT * FROM cpu_busy WHERE cpu = 'cpu0' AND value > 500`

Query Templates ▾

cpu_busy

time	cpu	host	value
2015-09-16T21:42:34Z	"cpu0"	"influxdb1"	500.09999999999997
2015-09-16T21:42:44Z	"cpu0"	"influxdb1"	500.34
2015-09-16T21:42:54Z	"cpu0"	"influxdb1"	500.5199999999999
2015-09-16T21:43:04Z	"cpu0"	"influxdb1"	500.68999999999994
2015-09-16T21:43:14Z	"cpu0"	"influxdb1"	500.90999999999997
2015-09-16T21:43:24Z	"cpu0"	"influxdb1"	501.03999999999996
2015-09-16T21:43:34Z	"cpu0"	"influxdb1"	501.28

Query: `SELECT * FROM cpu_busy WHERE cpu = 'cpu0' AND value > 100 AND time > now() - 10s GROUP BY host`

Query Templates ▾

cpu_busy
host:babel

time	cpu	value
2015-10-24T10:34:43Z	"cpu0"	4038.97

cpu_busy
host:influxdb

time	cpu	value
2015-10-24T10:34:46Z	"cpu0"	353.08

Data Sources

Edit data source

Name	telegraf	Default ☐	
Type	InfluxDB 0.9.x		

Http settings

Url	http://127.0.0.1:8086	Access ❓	proxy
Basic Auth	Enable ☐		

InfluxDB Details

Database	telegraf		
User	root	Password	••••

[Save] [Test Connection] [Cancel]

Collapse row
Add Panel ▶
Set height ▶
Move ▶
Row editor
Delete row

SELECT mean(value) **+**

FROM select measurement

WHERE **+**

GROUP BY time($interval) **+** no fill

T̲ **Text** General **Edit text**

Mode

markdown ▾

Content (This area uses **Markdown**. HTML is not supported)

Data frequency
This data is updated on a real-time basis
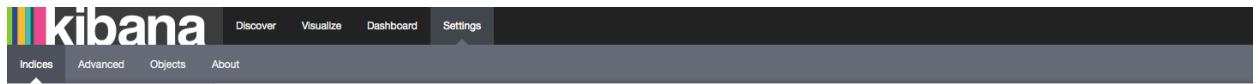
kibana

Discover   Visualize   Dashboard   Settings

Indices   Advanced   Objects   About

Index Patterns

★ logstash-*

Configure an index pattern

In order to use Kibana you must configure at least one index pattern. Index patterns are used to identify the Elasticsearch index to run search and analytics against. They are also used to configure fields.

☑ Index contains time-based events
☐ Use event times to create index names

Index name or pattern

Patterns allow you to define dynamic index names using * as a wildcard. Example: logstash-*

logstash-*

Time-field name ⓘ refresh fields

@timestamp

Create

---

kibana

Discover   Visualize   Dashboard   Settings

Indices   Advanced   Objects   About

Index Patterns **+ Add New**

★ logstash-*

★ logstash-*   ★ ⟳ 🗑

This page lists every field in the **logstash-*** index and the field's associated core type as recorded by Elasticsearch. While this list allows you to view the core type of each field, changing field types must be done using Elasticsearch's Mapping API %

Fields (16)   Scripted fields (0)

name ⇕	type ⇕	format ⇕	analyzed ⓘ ⇕	indexed ⓘ ⇕	controls
_source	_source				✎
type	string		✓	✓	✎
@version	string			✓	✎
_type	string			✓	✎
_id	string				✎
file	string		✓	✓	✎
host.raw	string			✓	✎
offset.raw	string			✓	✎
offset	string		✓	✓	✎
file.raw	string			✓	✎
host	string		✓	✓	✎
_index	string				✎
type.raw	string			✓	✎
message	string		✓	✓	✎
@timestamp	date			✓	✎
geoip.location	geo_point			✓	✎
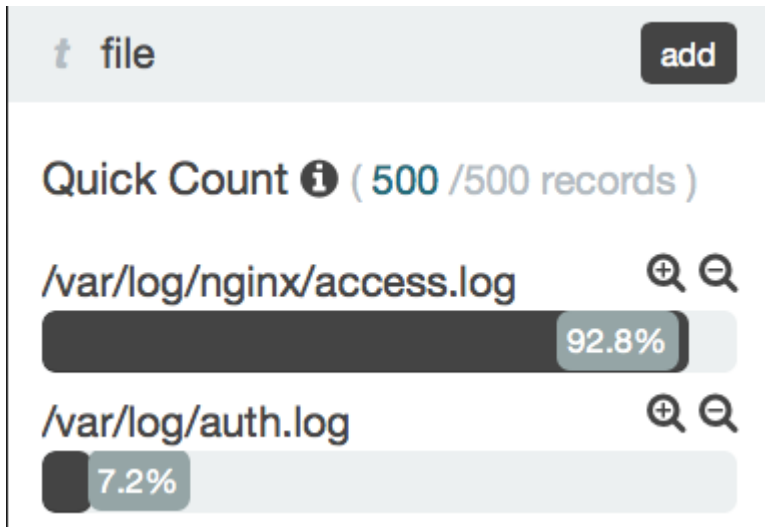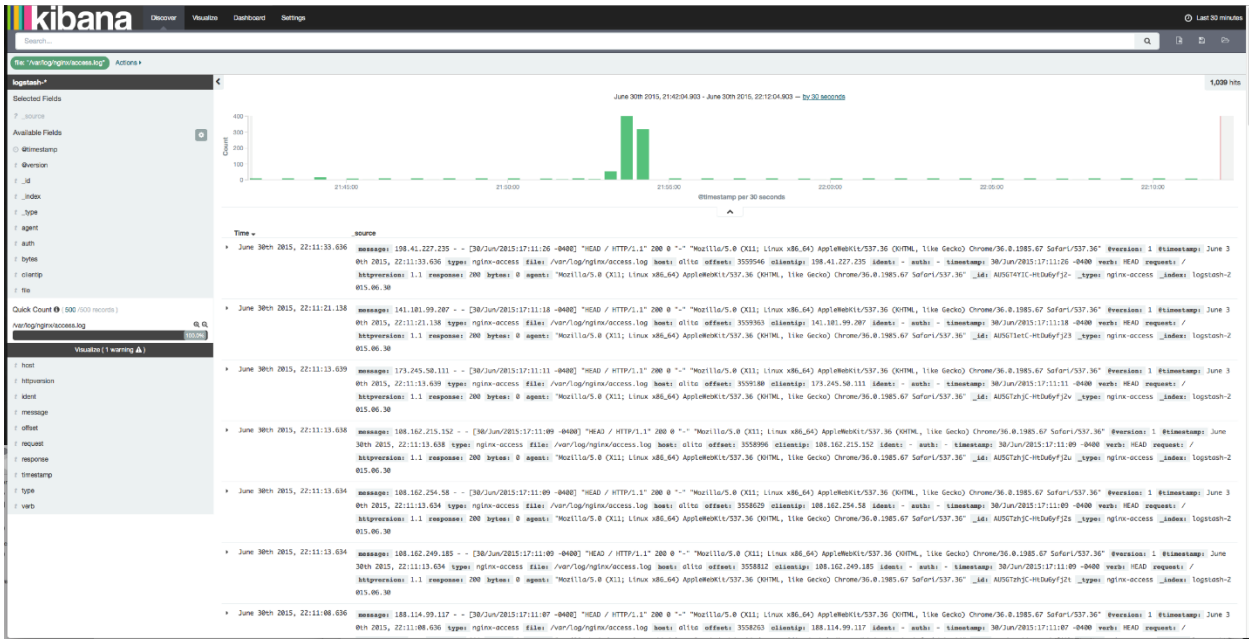
t request

Quick Count **ⓘ** (**500** /500 records)

/
⊕ ⊖

| 34.4% |

/posts/
⊕ ⊖

| 33.0% |

/posts
⊕ ⊖

| 32.6% |

Quick Count **ⓘ** (**500** /500 records)

198.41.226.234
⊕ ⊖

| 24.8% |

198.41.226.236
⊕ ⊖

| 24.8% |

198.41.227.233
⊕ ⊖

| 24.6% |

198.41.226.218
⊕ ⊖

| 24.0% |

103.22.200.112
⊕ ⊖

| 0.2% |
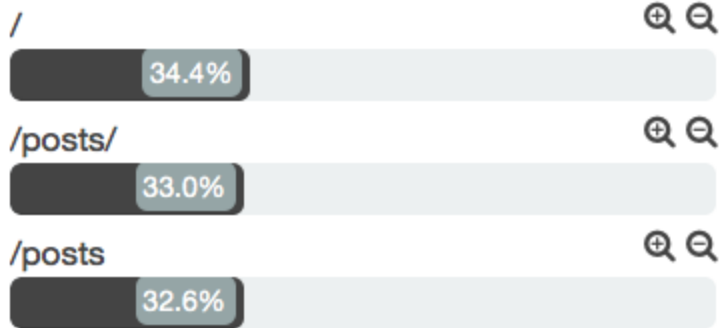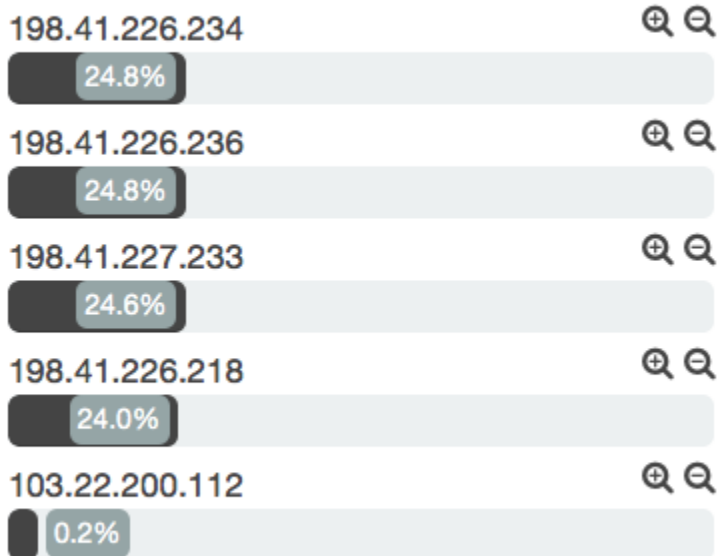
Visualize (1 warning ⚠)

logstash-*

Data | Options | ▶ | ✕
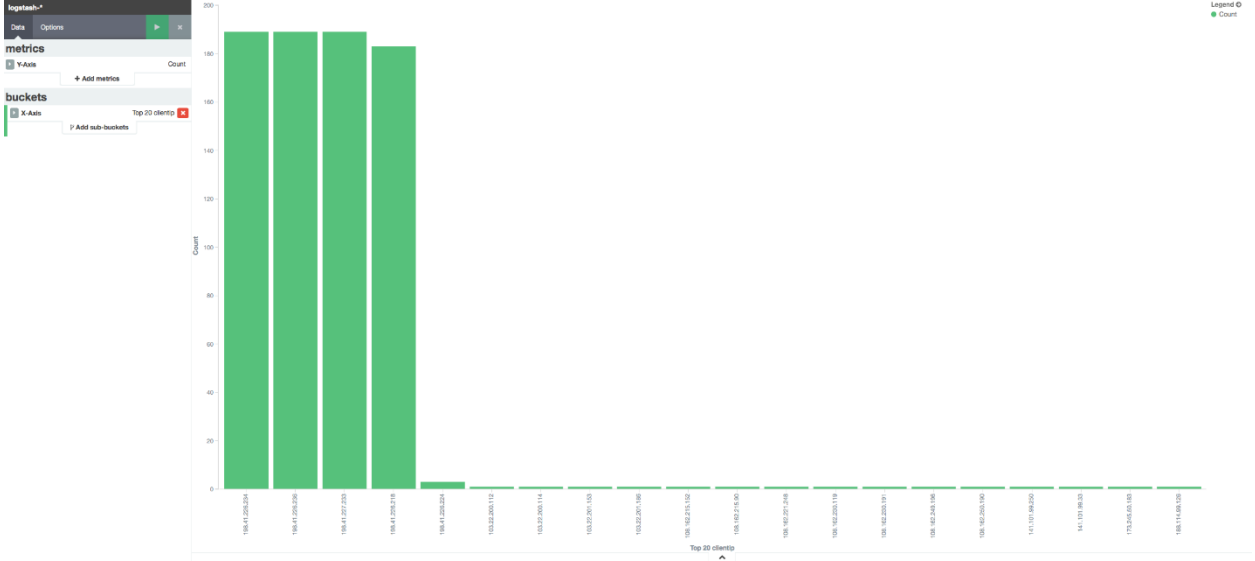
metrics

▶ Y-Axis   Count

+ Add metrics

buckets

▶ X-Axis   Top 20 clientip   ▲ ▼ ✕

▼ Split Chart   ▲ ▼ ✕

Rows | Columns

Sub Aggregation

Terms   ⬍

Field   ⚠ Analyzed Field

request   ⬍

Order   **Size**

Top   ⬍   3   ⬍

Order By

metric: Count   ⬍

◄ Advanced

⻏ Add sub-buckets

Failed password for backup from 208.109.103.212 port 47550 ssh2 @version: 799 _id: AU5GS4UkC-HtDu6yfjxm _type: syslog _index: logstash-2015.06.30

Failed password for uucp from 208.109.103.212 port 45944 ssh2 @version: 1 0 _id: AU5GS2m7C-HtDu6yfjxM _type: syslog _index: logstash-2015.06.30

Failed password for uucp from 62.210.7.55 port 62775 ssh2 @version: 1 @tim id: AU5GGgHpfkqmqR6wj5x- _type: syslog _index: logstash-2015.06.30

Failed password for nobody from 189.211.79.178 port 35616 ssh2 @version: 1 04 _id: AU5FkzrjfkqmqR6wj46E _type: syslog _index: logstash-2015.06.30

Failed password for games from 189.211.79.178 port 35508 ssh2 @version: 1 6 _id: AU5FkwqAfkqmqR6wj452 _type: syslog _index: logstash-2015.06.30

Chapter 10

ALL DATACENTERS ▾   ACTIONS ▾   SUBSCRIPTIONS ▾   1 OF 1 ▾   Search

	Name ⇕	IP ⇕	Events ⇕	☁⇕	⬆⇕	⏱⇕
🔊 sensuhost	10.131.154.77	DNS CRITICAL: Could not resolve sdfdsssf.com	Example Site	0.20.0	a few seconds ago

API Credentials

Live	**AccountSID**	**Test AccountSID**
	Used to exercise the REST API	Used to exercise the REST API
	ACd4704838e15e99f35203c5cde1ce82a1	AC89427835d6d2666a39b893b7fd980f38
	AuthToken (Request a Secondary Token)	**Test AuthToken**
	Keep this somewhere safe and secure	Keep this somewhere safe and secure
	🔒 ·································	🔒 ·································
	Learn more about REST API Credentials	Learn more about Test Credentials

●●●●○ 3 📶   00:15   ⬈ ✳ 46% ▮

< Messages   +44 1487 686048   Details

Message
Today 00:15

Sent from your Twilio trial account - Sensu RESOLVED: sensuhost/check_fail (10.131.154.77) Resolving on request of the API

Chapter 11
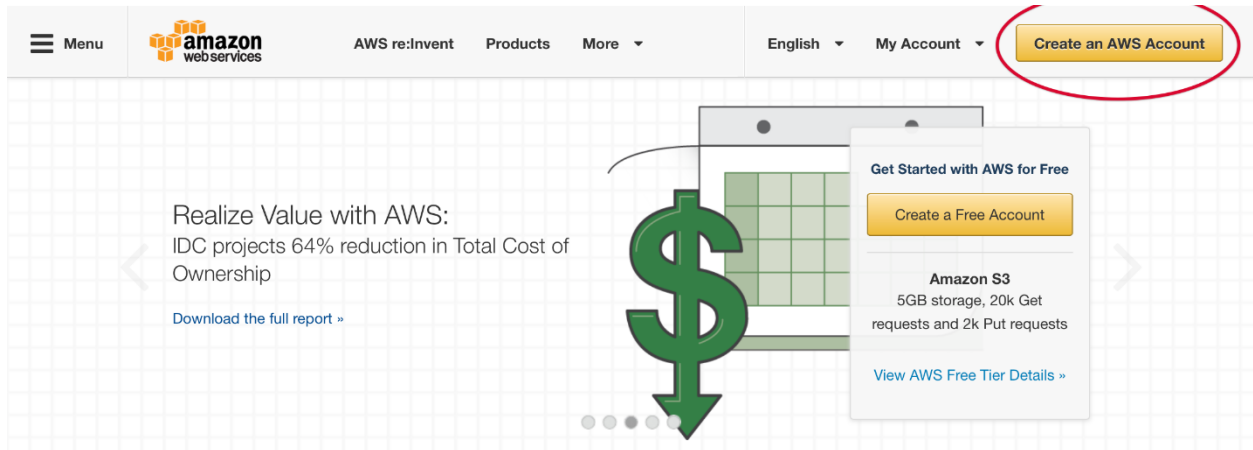
Identity &
Access
Management
Access Control
and Key
Management

Welcome to Identity and Access Management

IAM users sign-in link:

https://196761009956.signin.aws.amazon.com/console   Customize | Copy Link

IAM Resources

Users: 0   Roles: 0

Groups: 0   Identity Providers: 0

Customer Managed Policies: 0

Security Status   ▮▮▯▯▯ 1 out of 5 complete.

✅	Delete your root access keys	⌄
⚠️	Activate MFA on your root account	⌄
⚠️	Create individual IAM users	⌄
⚠️	Use groups to assign permissions	⌄
⚠️	Apply an IAM password policy	⌄

Manage MFA Device   ✕

If your virtual MFA application supports scanning QR codes, scan the following image with your smartphone's camera.

▸ Show secret key for manual configuration

After the application is configured, enter two consecutive authentication codes in the boxes below and click Activate Virtual MFA.

Authentication Code 1   [   ]

Authentication Code 2   [   ]

Cancel   Previous   **Activate Virtual MFA**

Enter User Names:

1. test1
2. test2
3. test3
4. test4
5. [ ]

Maximum 64 characters each

☑ **Generate an access key for each user**

Users need access keys to make secure REST or Query prot

For users who need access to the AWS Management Consol

Attach Policy

Select up to two policies to attach to the group.

Filter:	Policy Type ▾	Q▾ Search		Showing 148 results

		Policy Name ⇅	Attached Entities ⇅	Creation Time ⇅	Edited Time ⇅
☐	📦	AdministratorAccess	0	2015-02-06 18:39 UTC	2015-02-06 18:39 UTC
☐	📦	AmazonAPIGatewayAdmin…	0	2015-07-09 18:34 UTC+0100	2015-07-09 18:34 UTC…
☐	📦	AmazonAPIGatewayInvok…	0	2015-07-09 18:36 UTC+0100	2015-07-09 18:36 UTC…
☐	📦	AmazonAppStreamFullAcc…	0	2015-02-06 18:40 UTC	2015-02-06 18:40 UTC
☐	📦	AmazonAppStreamReadO…	0	2015-02-06 18:40 UTC	2015-02-06 18:40 UTC
☐	📦	AmazonCognitoDeveloper…	0	2015-03-24 17:22 UTC	2015-03-24 17:22 UTC
☐	📦	AmazonCognitoPowerUser	0	2015-03-24 17:14 UTC	2015-03-24 17:14 UTC
☐	📦	AmazonCognitoReadOnly	0	2015-03-24 17:06 UTC	2015-03-24 17:06 UTC
☐	📦	AmazonDynamoDBFullAcc…	0	2015-02-06 18:40 UTC	2015-02-06 18:40 UTC
☐	📦	AmazonDynamoDBFullAcc…	0	2015-02-06 18:40 UTC	2015-02-06 18:40 UTC
☐	📦	AmazonDynamoDBReadO…	0	2015-02-06 18:40 UTC	2015-02-06 18:40 UTC
☐	📦	AmazonEC2ContainerServ…	0	2015-03-19 18:45 UTC	2015-03-19 18:45 UTC
☐	📦	AmazonEC2ContainerServ…	0	2015-04-24 17:54 UTC+0100	2015-04-24 17:54 UTC…
☐	📦	AmazonEC2ContainerServ…	0	2015-04-09 17:14 UTC+0100	2015-04-09 17:14 UTC…

Cancel   Previous   **Next Step**

▾ Password Policy

A password policy is a set of rules that define the type of password an IAM user can set. For more information about password policies, go to Managing Passwords in Using IAM.

Currently, this AWS account does not have a password policy. Specify a password policy below.

Minimum password length: `6`

☐ Require at least one uppercase letter ⓘ

☐ Require at least one lowercase letter ⓘ

☐ Require at least one number ⓘ

☐ Require at least one non-alphanumeric character ⓘ

☑ Allow users to change their own password ⓘ

☐ Enable password expiration ⓘ

   Password expiration period (in days):

☐ Prevent password reuse ⓘ

   Number of passwords to remember:

☐ Password expiration requires administrator reset ⓘ

Apply password policy   **Delete password policy**

-

EC2
Virtual Servers in the Cloud

Create Security Group   ✕

Security group name ⓘ [   ]

Description ⓘ [   ]

VPC ⓘ [vpc-3b2c415e (172.31.0.0/16) *   ⬍]

* denotes default VPC

Security group rules:

Inbound	Outbound

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	
This security group has no rules				

[Add Rule]

Cancel   **Create**

Inbound	Outbound

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ		
HTTP ⬍	TCP	80	Anywhere ⬍	0.0.0.0/0	⊗
HTTPS ⬍	TCP	443	Anywhere ⬍	0.0.0.0/0	⊗
SSH ⬍	TCP	22	Custom IP ⬍	88.44.55.22/31	⊗

[Add Rule]

Inbound	Outbound

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Destination ⓘ		
SMTP ⬍	TCP	25	Custom IP ⬍		⊗
DNS (UDP) ⬍	UDP	53	Custom IP ⬍		⊗
DNS (TCP) ⬍	TCP	53	Custom IP ⬍		⊗

[Add Rule]

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. Learn more about instance types and how they can meet your computing needs.

Filter by: [All instance types ▾] [Current generation ▾] **Show/Hide Columns**

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
☑	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate
☐	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
☐	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
☐	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
☐	General purpose	m4.large	2	8	EBS only	Yes	Moderate
☐	General purpose	m4.xlarge	4	16	EBS only	Yes	High
☐	General purpose	m4.2xlarge	8	32	EBS only	Yes	High

Number of instances ⓘ   [1]

Purchasing option ⓘ   ☐ Request Spot Instances

Network ⓘ   [vpc-3b2c415e (172.31.0.0/16) (default) ▾] ⟳ **Create new VPC**

Subnet ⓘ   [No preference (default subnet in any Availability Zone) ▾] **Create new subnet**

Auto-assign Public IP ⓘ   [Use subnet setting (Enable) ▾]

IAM role ⓘ   [None ▾] ⟳ **Create new IAM role**

Shutdown behavior ⓘ   [Stop ▾]

Enable termination protection ⓘ   ☐ Protect against accidental termination

Monitoring ⓘ   ☐ Enable CloudWatch detailed monitoring
Additional charges apply.

Tenancy ⓘ   [Shared tenancy (multi-tenant hardware) ▾]
Additional charges will apply for dedicated tenancy.

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. Learn more about storage options in Amazon EC2.

Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/sda1	snap-bd9c25fb	8	General Purpose (SSD) ▾	24 / 3000	☑	Not Encrypted

[Add New Volume]

Step 5: Tag Instance

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. Learn more

Key (127 characters maximum)	Value (255 characters maximum)
Environment	QC
Department	WebOps
App	BethsMarvellousSite
Designer	Griff Morgan-Duffy
OriginatingDesignCompany	Mighty Meg productions

Create Tag   (Up to 10 tags maximum)

Assign a security group: ○ Create a **new** security group
                              ● Select an **existing** security group

	Security Group ID	Name	Description
☐	sg-9925f6fd	default	default VPC security group
☐	sg-e808d08c	webservers	Rules for Web Servers

Select an existing key pair or create a new key pair ✕

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

Choose an existing key pair ⬍

Select a key pair

No key pairs found ⬍

⚠ **No key pairs found**

You don't have any key pairs. Please create a new key pair by selecting the **Create a new key pair** option above to continue.

Cancel   **Launch Instances**

Load Balancer Protocol	Load Balancer Port	Instance Protocol	Instance Port
HTTP ⬍	80	HTTP ⬍	80
HTTPS (Secure HTTP) ⬍	443	HTTP ⬍	443

Add

Certificate Type: ○ Choose an **existing** SSL Certificate
● Upload a **new** SSL Certificate

Certificate Name:* [e.g. myServerCert]

Private Key:* [   ]
(pem encoded)

Public Key Certificate:* [   ]
(pem encoded)

Certificate Chain: [Optional]
(pem encoded)

Ping Protocol [TCP ⇕]

Ping Port [80]

Advanced Details

Response Timeout ⓘ [5] seconds

Health Check Interval ⓘ [30] seconds

Unhealthy Threshold ⓘ [2 ⇕]

Healthy Threshold ⓘ [10 ⇕]

☑	Load Balancer Name	▾	DNS Name	▾	Port Configuration	▾	Availability Zones	▾	Instance Count	▾	Health Check
☑	web		web-100965936.us-west-2.el...		80 (HTTP) forwarding to 80 (...		us-west-2a, us-west-2b...		1 Instance		TCP:80

Load balancer: ▌ web

Description	Instances	Health Check	Monitoring	Security	Listeners	Tags

DNS Name: web-100965936.us-west-2.elb.amazonaws.com (A Record)

Route 53

Scalable DNS and Domain Name Registration

DNS Management

If you already have a domain name, such as example.com, Route 53 can tell the Domain Name System (DNS) where to find web servers, mail servers, and other resources for your domain.
Learn More

Get Started Now

Health Check

Route 53 can monitor the health and performance of your application as well as your web servers and other resources. Route 53 can also redirect traffic to resources where your application is healthy.
Learn More

Get Started Now

Domain Registration

If you need a domain name, you can find an available name and buy it using Route 53. You can also make Route 53 the registrar for existing domains that you bought from other registrars.
Learn More

Get Started Now

Create Hosted Zone

A hosted zone is a container that holds information about how you want to route traffic for a domain, such as example.com, and its subdomains.

Domain Name: [   ]

Comment: [   ]

Type: Public Hosted Zone ▲▼

A public hosted zone determines how traffic is routed on the Internet.

🔍 Record Set Name	✕	Any Type ⇕	☐ **Aliases Only**	☐ **Weighted**

Only

⏮ ◀ **Displaying 1 to 2 out of 2 Record Sets** ▶ ⏭

Value	Evaluate Target Health	Health Check ID
ns-59.awsdns-07.com. ns-954.awsdns-55.net. ns-1216.awsdns-24.org. ns-1862.awsdns-40.co.uk.	-	-
ns-59.awsdns-07.com. awsdns-hostmaster.amazon.	-	-

Create Record Set

Name: [example] .stunthamster.com.

Type: [A – IPv4 address   ⇕]

Alias: ○ Yes ● No

TTL (Seconds): [300] [1m] [5m] [1h] [1d]

Value:
```
88.33.44.55
```

IPv4 address. Enter multiple addresses
on separate lines.
Example:
192.0.2.235
198.51.100.234

Routing Policy: [Simple   ⇕]

Route 53 responds to queries based only on the values in this record. Learn
More

New Relic

Step 1: Complete your profile.

*All fields are required

Your Name *

👤 First and last name, please

Your Phone Number *

📞 Please include area or international code.

Your Email Address *

✉ you@yourbusiness.com

Your New Relic Password *

🔒 Pick something secure!

New Relic.
APM

Our flagship product helps you monitor the performance and availability of your web applications.

New Relic.
BROWSER

Browser specific data so you can understand your software's performance from an end-user's perspective.

New Relic.
MOBILE

Quickly pinpoint performance problems in your mobile apps operating in complex productions environments.

New Relic.
SERVERS

Find health issues to things like CPU utilization, memory utilization, disk I/O utilization, and disk capacity.

New Relic.
INSIGHTS

Query application business metrics, performance data, and customer behaviors at lightning speed.

New Relic.
SYNTHETICS

Test and find issues with your software's business critical functionality before real users do.

New Relic. | APM | BROWSER | SYNTHETICS | MOBILE | SERVERS | PLUGINS | INSIGHTS | Alerts Beta | Tools ∨ | Help ∨ | Stunt Hamster ltd_2 | 3 ∨

Applications | Service maps | Key transactions | Alerts

Filter applications | Off | Show labels | ⊕ Add more | ⊓

Recent events

No Events In The Last 3 Days.

Name	End user	Page views	App server	Throughput	Error %	
My Application			0.439 ms	3 rpm	0%	⚙

1 Applications | 1 - 1 of 1 | < | >

⛶ Kiosk mode | Permalink

New Relic. | APM | BROWSER | SYNTHETICS | MOBILE | SERVERS | PLUGINS | INSIGHTS | Alerts Beta | Tools ∨ | Help ∨ | Stunt Hamster ltd_2 | 1 ∨

Applications | Service maps | Key transactions | Alerts

APPS
My Application

TIME PICKER
Last 30 minutes ending now ∨

MONITORING
Overview
Service maps
Transactions
Databases
External services
JVMs

EVENTS
Errors
Alerts
Deployments
Thread profiler

REPORTS
SLA
Availability
Scalability
Web transactions

Non-web transactions response time ∨ | 385 ms AVERAGE

500 ms
450 ms
400 ms
350 ms
300 ms
250 ms
200 ms
150 ms
100 ms
50 ms

14:05 | 14:10 | 14:15 | 14:20 | 14:25 | 14:30

Non-web transactions | JDBC | Background external

Apdex score ⓘ | NS [0.5]* APP SERVER

Throughput | 4.83 rpm AVERAGE

75
50
25

14:05 | 14:10 | 14:15 | 14:20 | 14:25 | 14:30

Member of policy Default application alert policy

Recent events

No Events In The Last 3 Days.

Transactions | App server time
ServletContextListener/com.liferay.portal.spring.c | 33.2 sec
Transaction traces: n/a
/com.liferay.portal.action.LayoutAction | 8.15 sec
Transaction traces: n/a
com.liferay.portal.servlet.MainServlet/init | 6.68 sec

Error rate | 0.00 %

My Application | 0 ms | 3 rpm | 0.00 err%

Web transactions response time ⌄

678 ms
APP SERVER

4500 ms	
4000 ms	
3500 ms	
3000 ms	
2500 ms	
2000 ms	
1500 ms	
1000 ms	
500 ms	

14:35 14:40 14:45 14:50 14:55 15:00

JVM   JDBC

Apdex score ⦾

0.96 [0.5]
APP SERVER

1
0.9
0.8
0.7

App Server

Throughput

10.2 rpm
AVERAGE

100

50

14:35 14:40 14:45 14:50 14:55 15:00
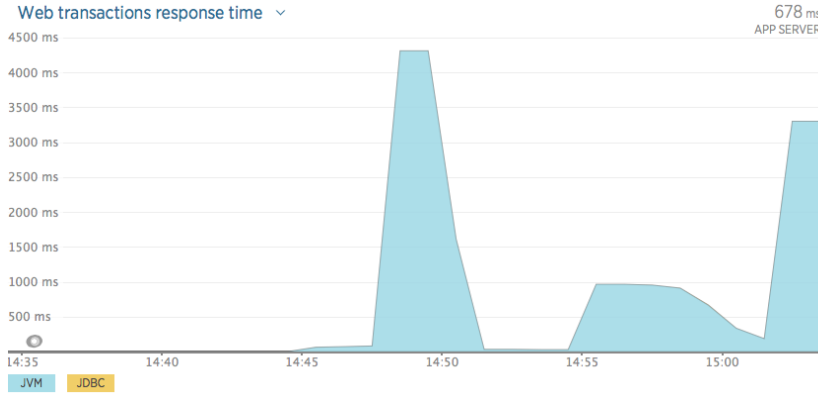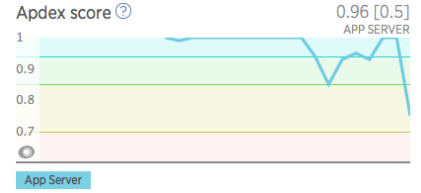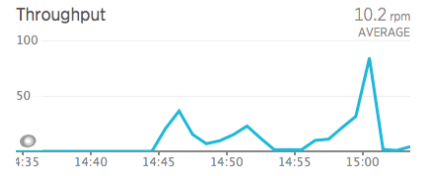
Web transactions response time ⌄

☐ Compare with yesterday and last week

Transactions   App server time

/Poller Servlet	2.45 ms
Transaction traces: n/a	
com.liferay.portal.scheduler.job.MessageSenderJob/ex	0.384 ms
Transaction traces: n/a	

Error rate

0.00 %

4 %
3 %
2 %
1 %

12:35 12:40 12:45 12:50 12:55 13:0
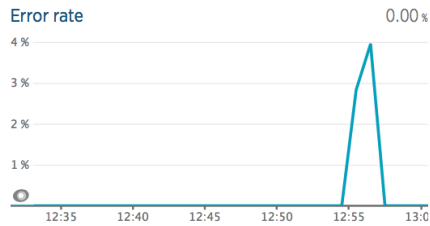
Member of policy Default application alert policy

Recent events

All ⦿ ✎ ⊗ ⚠ ▢ ▢ ⦾ <> ⚙ ▦

Yesterday

MY APPLICATION
Circuit breaker tripped java:My Application:8080
Circuit Breaker   15:00

Transactions

App server time

/com.liferay.portlet.wiki.action.EditPageA	7.61 sec

Transaction traces: **7.6 s**

/com.liferay.portlet.wiki.action.ViewNode	4.17 sec

Transaction traces: **8.3 s**

/com.liferay.portlet.login.action.LoginActi	2,310 ms

Transaction traces: **n/a**

/com.liferay.portal.action.LayoutAction	1,810 ms

Transaction traces: **8.8 s   4.8 s**

/html/portal/layout/view/portlet.jsp	996 ms

Transaction traces: **2.3 s**

Error rate

0.50 %
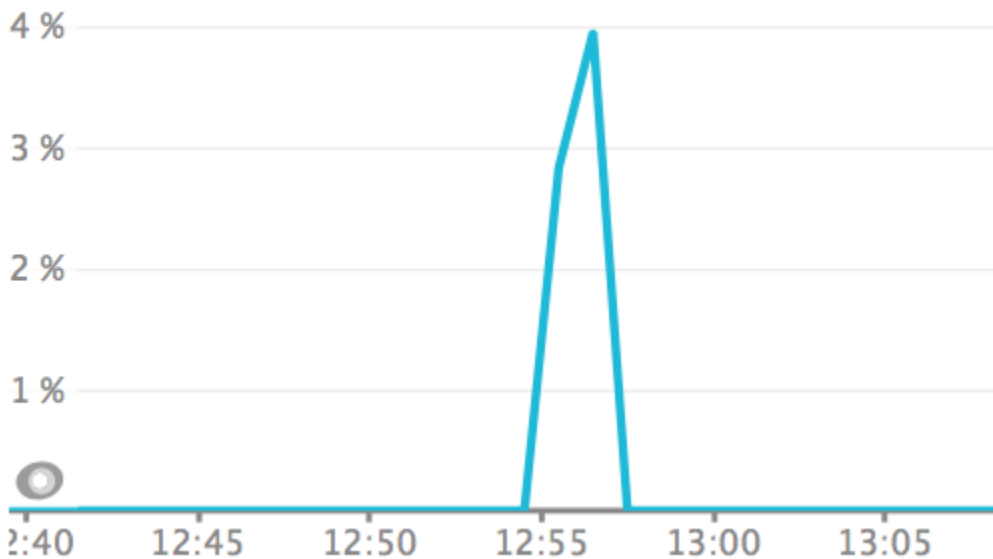
Recent events

All 🔥 ✎ ⊗ ⚠ ✏ 🖵 ⚡ < >

⚙ ▂▃▄

Today

MY APPLICATION
Circuit breaker tripped java:My Application:8080
Circuit Breaker   12:50

Yesterday

---

1 server

Server name	Apdex	Resp. time	Throughput	Error Rate	CPU usage	Memory
liferay 1 app instance	$0.88_{0.5}$	576 ms	3 rpm	0.50 %	21 %	1.3 GB

Type **Web** ▾

Most time consuming ▾

/com.liferay.portal.action.LayoutAction	48.2%
/com.liferay.portlet.wiki.action.ViewNodeAction	13.9%
/com.liferay.portlet.wiki.action.EditPageAction	12.7%
/html/portal/layout/view/portlet.jsp	8.31%
/com.liferay.portlet.login.action.LoginAction	7.7%
/Combo Servlet	4.23%
/html/portlet/dockbar/view_005fresources.jsp	2.23%
/html/js/liferay/available_005flanguages.jsp	1.85%
/html/portal/render_005fportlet.jsp	0.25%
/com.liferay.portlet.journalcontent.action.ViewAction	0.16%
/Poller Servlet	0.14%
/com.liferay.portlet.wiki.action.ViewPageAction	0.14%
/Invoker Filter - REQUEST	0.06%
/com.liferay.portal.action.RenderPortletAction	0.04%
/default	0.02%
/Main Servlet	0.02%
/Web Server Servlet	0.02%
/errors/code.jsp	0.01%
/Dynamic Resource Servlet	0%

Show all transactions table...

Top 5 web transactions ⑦
by percent of wall clock time

- /com.liferay.portal.action.LayoutAction
- /com.liferay.portlet.wiki.action.ViewNodeAction
- /com.liferay.portlet.wiki.action.EditPageAction
- /html/portal/layout/view/portlet.jsp
- /com.liferay.portlet.login.action.LoginAction

Throughput (rpm)

Non-Web   Web
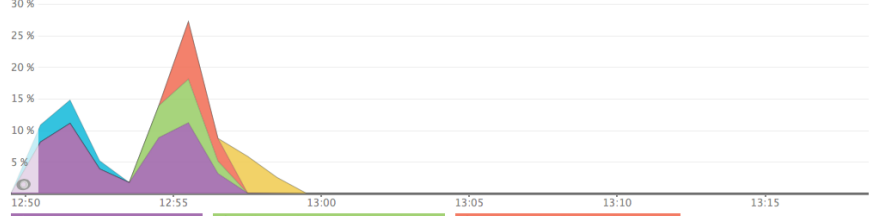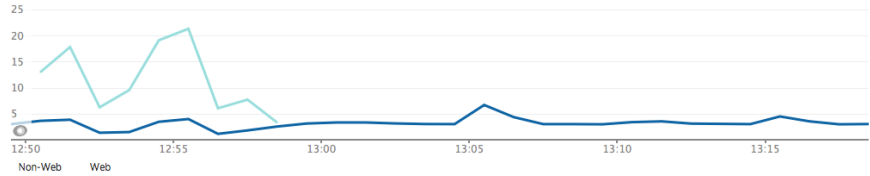
Transaction traces
Sample performance details

Search traces 🔍

Date	Transaction / Details	App server
12:58 — 22 minutes ago	/html/portal/layout/view/portlet.jsp /web/guest/testsetest	2,307 ms
12:56 — 24 minutes ago	/com.liferay.portlet.wiki.action.EditPageAction /c/portal/layout	7,611 ms

Sep 10, '15 12:56 pm
TRACE TIME

7,610 ms
RESP. TIME

Summary   Trace details

	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %

JspServlet.service()   html/common/themes/portlet.jsp   render_005fportlet_jsp.service()

com.liferay.portlet.StrutsPortlet/render   html/portal/render_005fportlet.jsp   EditPageAction.execute()
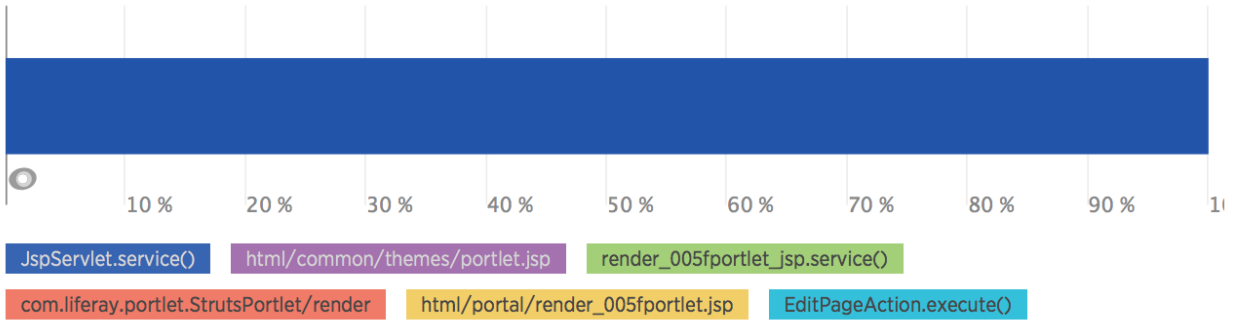
Slowest components	Count	Duration	%
JspServlet.service()	2	7,600 ms	100%
html/common/themes/portlet.jsp	1	5 ms	0%
render_005fportlet_jsp.service()	1	4 ms	0%
com.liferay.portlet.StrutsPortlet/render	1	4 ms	0%
html/portal/render_005fportlet.jsp	1	2 ms	0%
EditPageAction.execute()	1	1 ms	0%
Total		**7,610 ms**	**100%**

Sep 10, '15 12:56 pm
TRACE TIME
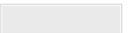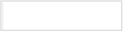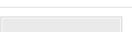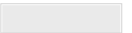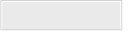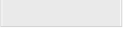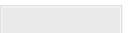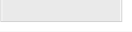
7,610 ms
RESP. TIME

Summary	**Trace details**

Expand performance problems   Collapse all

Duration (ms)	Duration (%)	Segment	Drilldown	Timestamp
7,610	100.00%	**render_005fportlet_jsp.service()**	🔍	0.000 s
2.0	0.03%	html/portal/render_005fportlet.jsp	🔍	0.000 s
0	0.00%	com.liferay.portlet.InvokerPortletImpl/render	🔍	0.002 s
7,610	99.92%	⌄ com.liferay.portlet.StrutsPortlet/render	🔍	0.002 s
1.0	0.01%	⌄ EditPageAction.execute()		0.006 s
7,600	99.86%	⌄ InvokerFilter.doFilter()	🔍	0.007 s
7,600	99.86%	⌄ JspServlet.service()	🔍	0.007 s
7,600	99.84%	⌄ portlet_jsp.service()	🔍	0.007 s
7,600	99.84%	⌄ html/common/themes/portlet.jsp	🔍	0.007 s
0	0.00%	⌄ page_jsp.service()		0.008 s
0	0.00%	⌄ page_jsp.service()		0.008 s
7,600	99.78%	⌄ InvokerFilter.doFilter()	🔍	0.008 s
7,600	99.78%	JspServlet.service()	🔍	0.008 s

Most time consuming ▾

JDBC database_version call	0.0031 s
JDBC other	0.003 s
JDBC resourcepermission select	0.0019 s
JDBC country insert	0.0013 s
JDBC region insert	0.0011 s
JDBC classname_ select	0.001 s
JDBC resourceaction select	0.001 s
JDBC system_tables select	0.0008 s
JDBC portlet select	0.0002 s
JDBC role_ select	0.0002 s
JDBC user_ select	0.0002 s
JDBC users_roles select	0.0002 s
JDBC assetentry select	0.0001 s
JDBC group_ select	0.0001 s
JDBC image delete	0.0001 s
JDBC kaleotaskinstancetoken select	0.0001 s
JDBC layout select	0.0001 s

JDBC overview

Top database operations by time consumed

Legend: JDBC region insert · JDBC resourcepermission select · JDBC database_version call · JDBC other · JDBC country insert

Database response time

Legend: JDBC insert · JDBC other · JDBC call · JDBC update · JDBC delete · JDBC select
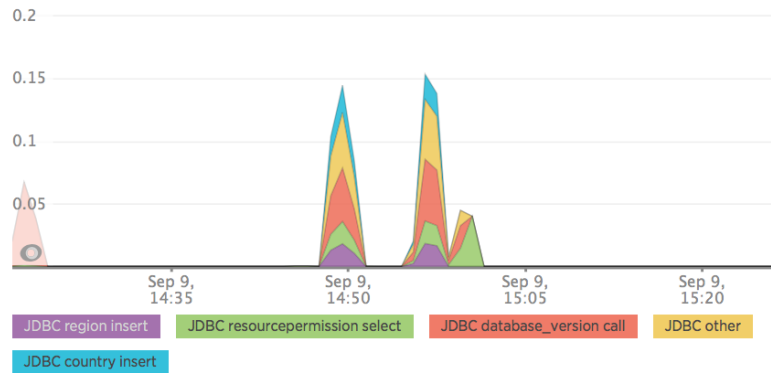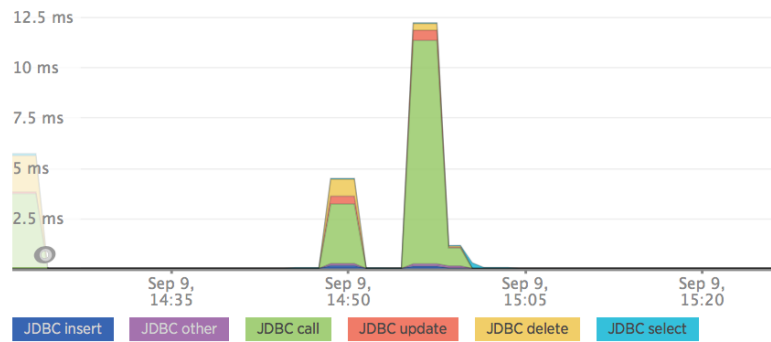
JDBC system_tables select

5.64 ms   **0.141** cpm
RESP. TIME   THROUGHPUT

Response time

| | Sep 9,
14:35 | Sep 9,
14:50 | Sep 9,
15:05 | Sep 9,
15:20 |

Throughput

| | Sep 9,
14:35 | Sep 9,
14:50 | Sep 9,
15:05 | Sep 9,
15:20 |
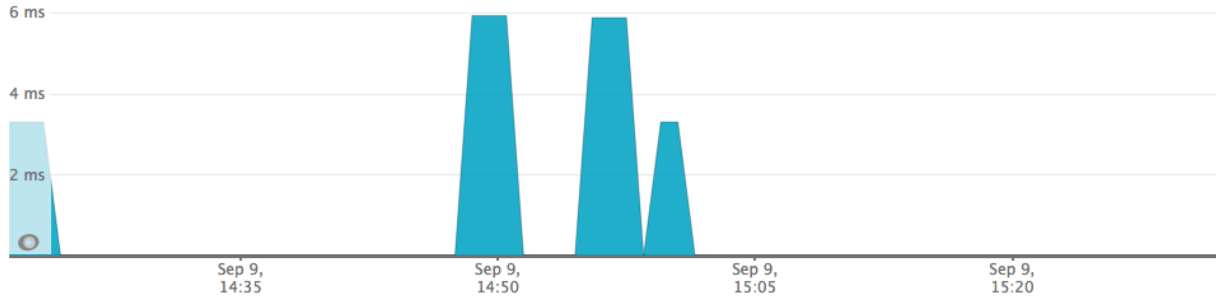
Time consumption by caller

| 10 % | 20 % | 30 % | 40 % | 50 % | 60 % | 70 % | 80 % | 90 % | 10 |

com.liferay.portal.servlet.MainServlet/init   ServletContextListener/com.liferay.portal.spring.context.PortalContextLoaderListener/contextInitialized   /Web Server Servlet
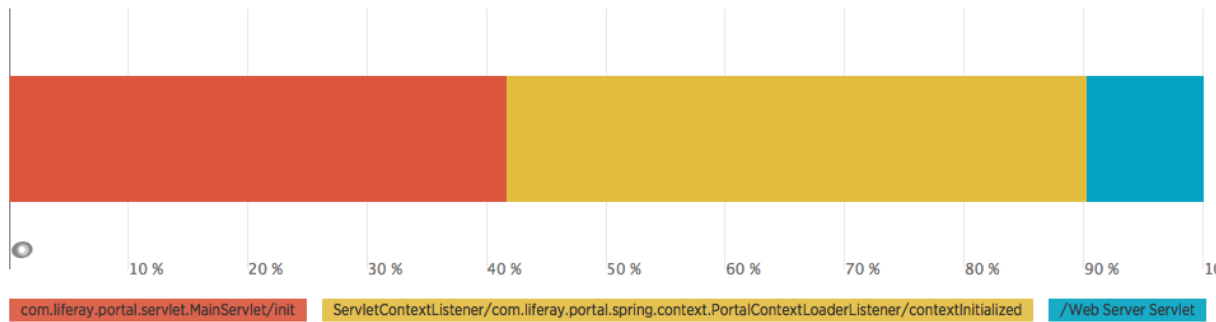
Response time and throughput

Average response time   Throughput

CPU utilization

User Time
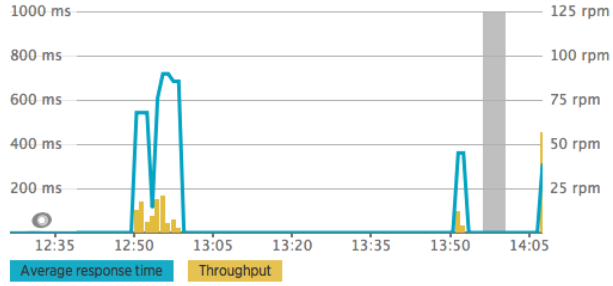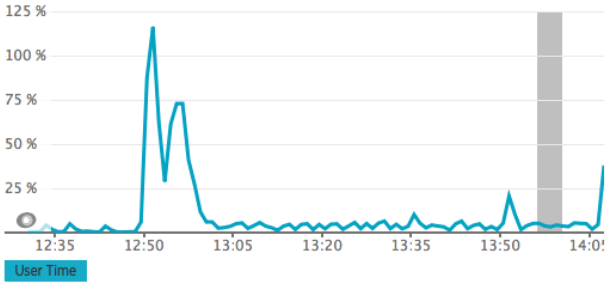
Apdex score: 0.88 [0.5] (Good)
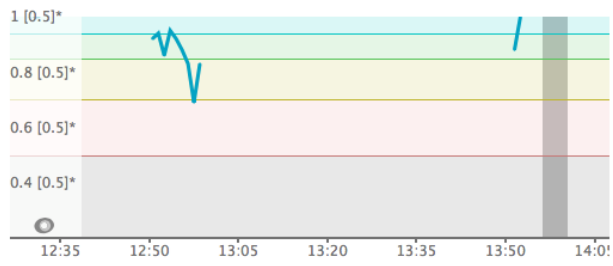
Physical memory utilization
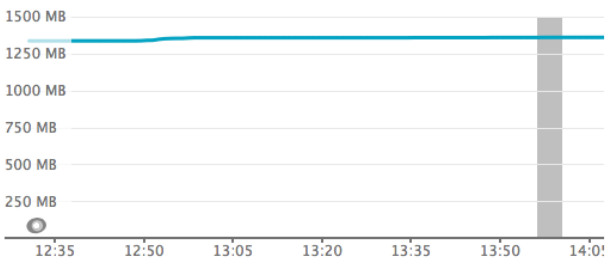
Error rate
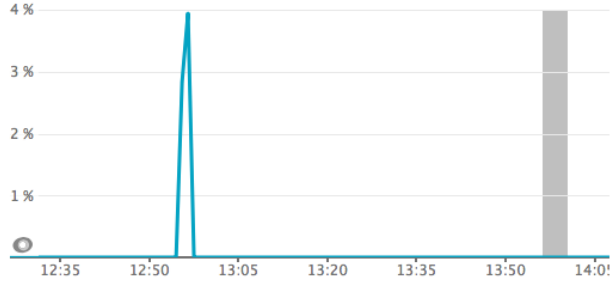
Database
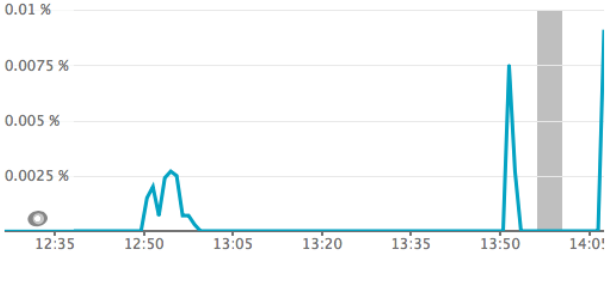
Account information

Name

Stunt Hamster ltd_2 🖉

Subscription

Web Lite
Mobile Lite
Insights None
Browser Lite
Synthetics Lite

Billing CC Email

— 🖉

License key

```
09ceca111dc7a9df6a96495a1115510a2ec24505
```

7,600	99.78%	InvokerFilter.doFilter()	🔍	0.008 s
7,600	**99.78%**	JspServlet.service()	🔍	0.008 s

Stack trace ⊗

```
              javax.servlet.http.HttpServlet.service (HttpServlet.java:729)
….catalina.core.ApplicationFilterChain.internalDoFilter
(ApplicationFilterChain.java:305)
…g.apache.catalina.core.ApplicationFilterChain.doFilter
(ApplicationFilterChain.java:210)
…el.servlet.filters.invoker.InvokerFilterChain.doFilter (InvokerFilterChain.java:116)
….kernel.servlet.filters.invoker.InvokerFilter.doFilter (InvokerFilter.java:124)
….catalina.core.ApplicationFilterChain.internalDoFilter
(ApplicationFilterChain.java:243)
…g.apache.catalina.core.ApplicationFilterChain.doFilter
(ApplicationFilterChain.java:210)
  org.apache.catalina.core.ApplicationDispatcher.invoke
(ApplicationDispatcher.java:749)
…g.apache.catalina.core.ApplicationDispatcher.doInclude
(ApplicationDispatcher.java:605)
 org.apache.catalina.core.ApplicationDispatcher.include
(ApplicationDispatcher.java:544)
…al.servlet.DirectServletPathRegisterDispatcher.include
(DirectServletPathRegisterDispatcher.java:55)
…servlet.ClassLoaderRequestDispatcherWrapper.doDispatch
(ClassLoaderRequestDispatcherWrapper.java:78)
…al.servlet.ClassLoaderRequestDispatcherWrapper.include
(ClassLoaderRequestDispatcherWrapper.java:53)
             com.liferay.taglib.util.IncludeTag.include (IncludeTag.java:295)
           com.liferay.taglib.util.IncludeTag.doInclude (IncludeTag.java:192)
           com.liferay.taglib.util.IncludeTag.doEndTag (IncludeTag.java:83)
….apache.jsp.html.common.themes.portlet_jsp._jspService (portlet_jsp.java:4766)
         org.apache.jasper.runtime.HttpJspBase.service (HttpJspBase.java:70)
              javax.servlet.http.HttpServlet.service (HttpServlet.java:729)
   org.apache.jasper.servlet.JspServletWrapper.service (JspServletWrapper.java:432)
    org.apache.jasper.servlet.JspServlet.serviceJspFile (JspServlet.java:390)
```