

Sysadmin

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April 17, 2020

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1 Servers

- motsugo
- mooneye
- molmol
- murasoi

- medico
- maltair
- loveday
- magikarp
- mudkip

- chubsucker
- cichlid
- corvo
- corydoras
- cobra
- christmas
- catfish
- napoli
- clownfish
- pinball
- porcupine

1 `return [f"{h[0]}.ucc.asn.au" for h in hosts]`

- motsugo.ucc.asn.au
- mooneye.ucc.asn.au
- molmol.ucc.asn.au
- murasoi.ucc.asn.au

- medico.ucc.asn.au
- maltair.ucc.asn.au
- loveday.ucc.asn.au
- magikarp.ucc.asn.au
- mudkip.ucc.asn.au

```
1 cat /etc/*-release | sed 's/=/\t/g'
```

```
PRETTY_NAME    Debian GNU/Linux 9 (stretch)
NAME           Debian GNU/Linux
VERSION_ID     9
VERSION        9 (stretch)
ID             debian
HOME_URL       https://www.debian.org/
SUPPORT_URL    https://www.debian.org/support
BUG_REPORT_URL https://bugs.debian.org/
```

```
1 for host in $hosts; do
2 ping -c 1 $host | grep bytes
3 done
```

```

PING  motsugo.ucc.asn.au  (130.95.13.7):      56  data  bytes
   64  bytes  from 130.95.13.7: icmp_seq=0 ttl=252 time=14.367 ms
PING  mooneye.ucc.asn.au  (130.95.13.9):      56  data  bytes
   64  bytes  from 130.95.13.9: icmp_seq=0 ttl=252 time=12.880 ms
PING  molmol.ucc.asn.au   (130.95.13.5):      56  data  bytes
   64  bytes  from 130.95.13.5: icmp_seq=0 ttl=252 time=13.536 ms
PING  murasoi.ucc.asn.au  (130.95.13.1):      56  data  bytes
   64  bytes  from 130.95.13.1: icmp_seq=0 ttl=252 time=13.861 ms
PING  medico.ucc.asn.au   (130.95.13.22):     56  data  bytes
   64  bytes  from 130.95.13.22: icmp_seq=0 ttl=252 time=12.153 ms
PING  maltair.ucc.asn.au  (130.95.13.32):     56  data  bytes
   64  bytes  from 130.95.13.32: icmp_seq=0 ttl=252 time=12.733 ms
PING  loveday.ucc.asn.au  (130.95.13.33):     56  data  bytes
   64  bytes  from 130.95.13.33: icmp_seq=0 ttl=252 time=12.824 ms
PING  magikarp.ucc.asn.au (130.95.13.47):     56  data  bytes
   64  bytes  from 130.95.13.47: icmp_seq=0 ttl=252 time=12.597 ms
PING  mudkip.ucc.asn.au   (130.95.13.46):     56  data  bytes
   64  bytes  from 130.95.13.46: icmp_seq=0 ttl=252 time=12.332 ms

```

Service	Machine
User Shells	Motsugo, Mussel, Meersau, Musdea (FreeBSD), Maaxen (Win), Gothamburg (Mac)
DNS	Mooneye
Files	Motsugo (/home), Molmol (/away, /space, /services, /mp3s, /vmstore)
AD	Samson
LDAP	Mussel
Routing	Murasoi
Web	Mussel (core pages, planet), Mooneye (wiki, webcams)

2 Networking

Router configuration (i.e. firewall) is described by [this file on murasoi](#).

Wheel-keys are managed by [push.sh](#).

3 User services

3.1 Password reset

Run Process

```
1 (setq ucc-sysadmin/pw-reset-requester-username (ivy-read "User who requested reset: "
↳ ucc-sysadmin/users))
2 (setq ucc-sysadmin/pw-reset-requester-new-pw (read-string "New password: "))
3 (gui-select-text (format "Hi %s, your new password is %s. Please change it immediately by
↳ logging into on one of \textls*[70]{\textsc{ucc}}'s servers :) (to do this you can ssh
↳ %s@ssh.ucc.asn.au in a terminal)"
4 ucc-sysadmin/pw-reset-requester-username
5 ucc-sysadmin/pw-reset-requester-new-pw
6 ucc-sysadmin/pw-reset-requester-username))
7 (print "Done. Message copied to clipboard")
```

Done. Message copied to clipboard

```
1 echo "Changing $theuser's password at $(date --iso-8601=minutes)"
2 samba-tool user setpassword $theuser --newpassword=$thepassword --must-change-at-next-login
```

```
Sun Apr 5 15:55:44 \textls*[70]{\textsc{awst}} 2020
Changed password \textls*[70]{\textsc{ok}}
```

4 vm Creation

Run Process

4.1 Collect info

```
1 samba-tool group listmembers gumby
```

```
1 (setq ucc-sysadmin/users (split-string users "\n"))
2 (delete "Administrator" ucc-sysadmin/users)
3 (format "Total users: %s" (length ucc-sysadmin/users))
```

Total users: 1338

```
1 (setq ucc-sysadmin/vm-requester-username (ivy-read "User who requested
↳ \textls*[70]{\textsc{vm}}: " ucc-sysadmin/users))
2 (setq ucc-sysadmin/vm-name (ivy-read (format "\textls*[70]{\textsc{vm}} name: %s-"
↳ ucc-sysadmin/vm-requester-username) '()))
3 (setq ucc-sysadmin/vm-comment (ivy-read "\textls*[70]{\textsc{vm}} comment: " '()))
4 (setq ucc-sysadmin/vm-lifetime (ivy-read "What is the expected lifetime of this
↳ \textls*[70]{\textsc{vm}}: " ('("long term" "next few weeks" "new few months" "not for a
↳ while")))
5 (setq ucc-sysadmin/vm-memory (ivy-read "\textls*[70]{\textsc{vm}} memory (MiB): " ('("512"
↳ "1024" "2048" "4086") :def "2048"))
6 (setq ucc-sysadmin/vm-cores (ivy-read "\textls*[70]{\textsc{vm}} processes: " ('("1" "2" "3"
↳ "4") :def "2"))
7 (setq ucc-sysadmin/vm-disksize (ivy-read "\textls*[70]{\textsc{vm}} disk size: " ('("10" "20"
↳ "40" "50" "80") :def "20"))
8 (setq ucc-sysadmin/vm-vmhost (ivy-read "\textls*[70]{\textsc{vm}} host: " ('("medico" "maltair"
↳ "loveday" "magikarp" "mudkip")))
```

```
1 tla $theuser | sed 's/: /\t/g'
```

```
TLA    [THA]
Name   Tom Hill Almeida
Login  tommoa
```

```
1 tla $USER | sed 's/: /\t/g'
```

```
TLA    [TEC]
Name   Timothy Chapman
Login  tec
```

4.2 Make vm

4.2.1 Get new vm id & description

```
1 pvsh get /cluster/nextid
```

169

```
1 (setq ucc-sysadmin/vm-id vmid)
```

169

4.2.2 Network configuration

```
1 cat /etc/bind/domains/primary/ucc.machines
```

```
1 import re
2 bindconfig = re.sub(r'\s*#.*', '', bindconfig)
3 bindlines = bindconfig.split('\n')
4 bindlines = list(filter(lambda l: re.search(r'\s*A: \d+$', l), bindlines))
5 boundsips = [int(re.sub('\s*A: ', '', l)) for l in bindlines]
6 available = [i for i in range(128,193) if i not in boundsips]
7 return available
```

128 149 153 154 155 159 160 161 162 163 164 165 166 167 169 170 175 176

```
1 (setq ucc-sysadmin/vm-ip vmip)
```

128

```
1 echo "[$vmname.$vmuser.ucc.com.]
2 A: $vmip
3 \textls*[70]{\textsc{aaaa}}: 102::$vmip
4 \textls*[70]{\textsc{hinfo}}: \"\textls*[70]{\textsc{vm}} on $vmhost\" \"$vmcomment\"
5 addDomain: no
6 zones: ucrev 6rev"
```

[dummy-vm.tec.ucc.com.] A: 128 AAAA: 102::128 HINFO: "VM on maltair" "it's a test"
addDomain: no zones: ucrev 6rev

[endpoint.mtearle.ucc.com.] A: 128 AAAA: 102::128 HINFO: "VM on maltair" "Test VM"
addDomain: no zones: ucrev 6rev

4.2.3 Generate description

```
1 (setq ucc-sysadmin/vm-description (concat (format "Created on %s for %s by %s %s"
↳ (format-time-string "%Y-%m-%d") vmuser-tla myself myself-tla)
2 (format "\n0wner: %s <%s@ucc.asn.au>" vmuser-fullname vmuser)
```

```

3     (format "\nIP: 130.95.13.%s" ucc-sysadmin/vm-ip)
4     "\n\n" vmcomment (if (equal ucc-sysadmin/vm-lifetime "") "" (format "\nLifetime: %s"
↪ ucc-sysadmin/vm-lifetime))))

```

Created on 2020-03-31 for [\textls*[70]{\textsc{tec}}] by Timothy Chapman [\textls*[70]{\textsc{ip}}]: 130.95.13.128
Owner: Timothy Chapman <tec@ucc.asn.au>

it's a test
Lifetime: nil

4.2.4 Create vm

```

1 (setq ucc-sysadmin/vm-confirm (counsel--yes-or-no-p (format "\textls*[70]{\textsc{vm}} on %s
↪ for %s with name %s
2 With %s cores, %s MiB memory and %sGB storage.
3 Assigned \textls*[70]{\textsc{ip}}: 130.95.13.%s
4
5 %s
6
7 Does this look alright?" ucc-sysadmin/vm-vmhost ucc-sysadmin/vm-requester-username
8 ucc-sysadmin/vm-name ucc-sysadmin/vm-cores ucc-sysadmin/vm-memory ucc-sysadmin/vm-disksize
9 ucc-sysadmin/vm-ip ucc-sysadmin/vm-comment)))

```

```

1 qm create $vmid --memory $vmmemory --net0 virtio,bridge=vibr0,tag=4 --ostype l26 --description
↪ "$vmdescription" --virtio0 "vmstore-ssd-vm:$vmdisksize" --onboot yes --sockets 1 --cores
↪ $vmcores --pool Member-\textls*[70]{\textsc{vm}}\protect\scalebox{.91}{.84}{s}} --name
↪ "$vmuser-$vmname"
2 qm status $vmid -verbose

```

0

4.2.5 Apply network config, and do/the rest of the things™

```

1 import re
2 configitems = {}
3 configlines = config.split("\n")
4
5 marker = 0
6 seenIp = ""
7 for i in range(len(configlines)):
8     line = configlines[i]
9     # if start of bind block
10    if re.search("^\[.+\]", line) or i is len(configlines) - 1:

```



```
11     commentabove = bool(re.search(r"\s*#", configlines[i - 1]))
12     if marker > 0:
13         configitems[seenIp] = "\n".join(configlines[marker:i - commentabove]).strip()
14         # if not encountering first block and line before is comment, grab that
15         if i > 0 and commentabove:
16             marker = i - 1
17         else:
18             marker = i
19         seenIp = ""
20     elif re.search("^A: [\d\.]+", line):
21         seenIp = "{:0>4}".format(line.replace("A: ", "")) # 0-pad for sorting
22 for k,v in sorted(configitems.items()):
23     print(k,v,end='\n\n')
```

TODO the stuff here doesn't seem to work