CSCI4113
LAB3 Notes

Milan Formanek

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1.

For this assignment a puppet script was created and uploaded to github. The scipt is then downloaded and deployed to each machine through an ssh session. The script is identical on machines A to D with an added section creating the shares for machine E. Below is the procedure of deploying the puppet script on machines A-D.

```
1  [root@machinea ~]# wget -O site.pp 'https://bit.ly/2Se1S7D'
2  --2019-02-18 23:35:24--  https://bit.ly/2Se1S7D
3  Resolving bit.ly (bit.ly)... 67.199.248.11, 67.199.248.10
4  Connecting to bit.ly (bit.ly)|67.199.248.11|:443... connected.
5  HTTP request sent, awaiting response... 301 Moved Permanently
6  Location: https://raw.githubusercontent.com/mformanek/LSA/master/st_pc.pp [following]
7  --2019-02-18 23:35:24--  https://raw.githubusercontent.com/mformanek/LSA/master/st_pc.pp
8  Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 151.101.68.133
9  Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|151.101.68.133|:443... connected.
10 HTTP request sent, awaiting response... 200 OK
11 Length: 4166 (4.1K) [text/plain]
12 Saving to: 'site.'pp
13
14 100%[====================================>] 4,166       --.-K/s   in 0s
15
16 2019-02-18 23:35:24 (24.9 MB/s) - 'site.'pp saved [4166/4166]
17 [root@machinea ~]# puppet apply site.pp
18 Notice: Compiled catalog for machinea.dundermifflin.com in environment production in 0.33 seconds
19 Notice: /Stage[main]/Main/User[mformanek]/ensure: created
20 Notice: /Stage[main]/Main/User[dphilbin]/ensure: created
21 Notice: /Stage[main]/Main/User[mpalmer]/ensure: created
22 Notice: /Stage[main]/Main/User[pbeesly]/ensure: created
23 Notice: /Stage[main]/Main/Group[managers]/ensure: created
24 Notice: /Stage[main]/Main/User[dschrute]/ensure: created
25 Notice: /Stage[main]/Main/Group[sales]/ensure: created
26 Notice: /Stage[main]/Main/User[plapin]/ensure: created
27 Notice: /Stage[main]/Main/User[abernard]/ensure: created
28 Notice: /Stage[main]/Main/User[tflenderson]/ensure: created
29 Notice: /Stage[main]/Main/User[shudson]/ensure: created
30 Notice: /Stage[main]/Main/User[cbratton]/ensure: created
31 Notice: /Stage[main]/Main/User[jhalpert]/ensure: created
32 Notice: /Stage[main]/Main/User[kkapoor]/ensure: created
33 Notice: /Stage[main]/Main/User[mscott]/ensure: created
34 Notice: /Stage[main]/Main/Group[accounting]/ensure: created
35 Notice: /Stage[main]/Main/User[kmalone]/ensure: created
36 Notice: /Stage[main]/Main/User[omartinez]/ensure: created
37 Notice: /Stage[main]/Main/User[amartin]/ensure: created
38 Notice: Finished catalog run in 0.84 seconds
39 [root@machineb ~]# ls /home
40 abernard  dphilbin  kkapoor    mpalmer    pbeesly  tflenderson
41 amartin   dschrute  kmalone    mscott     plapin
42 cbratton  jhalpert  mformanek  omartinez  shudson
43 [root@machinea ~]#
```

The puppet script *site.pp* consists of 3 main parts.

1

1.1 group

The group section creates the user groups managers, sales and accounting. The gid is set to be fixed in order to be consistent across all machines.

1.2 user

This section creates the individual users as specified in the lab manual. Groups, passwords, shells and uids are set for the users. The setting managehome is set to true in order to create the individual user directories in /home/. Uids are set to be unique for each user, in the thousands for the users and in the hundreds for me as the administrator.

1.3 file

This part of the script is only deployed to machine E the file server. The 3 shared directories for managers, accounting and sales are created here. Each share is set to be owned by the manager of the individual division and it's group. Mode is set to 3770 allowing the owner and group read, write and execute privileges as well as setting the setgid and sticky bits.

2. site.pp

```
1   #Create Users and User Groups on all the machines
2
3     group { 'managers':
4       ensure => 'present',
5       gid => 2001,
6     }
7
8       group { 'sales':
9       ensure => 'present',
10      gid => 2002,
11    }
12
13      group { 'accounting':
14      ensure => 'present',
15      gid => 2003,
16    }
17
18    user { 'mscott':
19      ensure      => 'present',
20      comment     => 'M Scott',
21      managehome => true,
22      password    => '!!',
23      groups      => 'managers',
24      shell       => '/bin/bash',
25      uid         => '3001',
26    }
27
28    user { 'dschrute':
29      ensure      => 'present',
30      comment     => 'D Schrute',
31      managehome => true,
32      password    => '!!',
33      groups      => 'managers',
34      shell       => '/bin/bash',
35      uid         => '3002',
36    }
37
38    user { 'jhalpert':
39      ensure      => 'present',
40      comment     => 'J Halpert',
41      managehome => true,
42      password    => '!!',
```

```
 43      groups    => 'managers',
 44      shell     => '/bin/bash',
 45      uid       => '3003',
 46    }
 47
 48    user { 'pbeesly':
 49      ensure    => 'present',
 50      comment   => 'P Beesly',
 51      managehome => true,
 52      password  => '!!',
 53      shell     => '/bin/bash',
 54      uid       => '3004',
 55    }
 56
 57    user { 'abernard':
 58      ensure    => 'present',
 59      comment   => 'A Bernard',
 60      managehome => true,
 61      password  => '!!',
 62      groups    => 'sales',
 63      shell     => '/bin/bash',
 64      uid       => '3005',
 65    }
 66
 67  user { 'amartin':
 68      ensure    => 'present',
 69      comment   => 'A Martin',
 70      managehome => true,
 71      password  => '!!',
 72      groups    => 'accounting',
 73      shell     => '/bin/bash',
 74      uid       => '3006',
 75    }
 76
 77  user { 'kkapoor':
 78      ensure    => 'present',
 79      comment   => 'K Kapoor',
 80      managehome => true,
 81      password  => '!!',
 82      shell     => '/bin/bash',
 83      uid       => '3007',
 84    }
 85
 86  user { 'omartinez':
 87      ensure    => 'present',
 88      comment   => 'O Martinez',
 89      managehome => true,
 90      password  => '!!',
 91      groups    => 'accounting',
 92      shell     => '/bin/bash',
 93      uid       => '3008',
 94    }
 95
 96  user { 'dphilbin':
 97      ensure    => 'present',
 98      comment   => 'D Philbin',
 99      managehome => true,
100      password  => '!!',
101      shell     => '/bin/bash',
102      uid       => '3009',
103    }
104
105  user { 'tflenderson':
106      ensure    => 'present',
107      comment   => 'T Flenderson',
108      managehome => true,
109      password  => '!!',
110      shell     => '/bin/bash',
111      uid       => '3010',
112    }
113
114  user { 'kmalone':
115      ensure    => 'present',
116      comment   => 'K Malone',
117      managehome => true,
118      password  => '!!',
119      groups    => 'accounting',
120      shell     => '/bin/bash',
121      uid       => '3011',
122    }
123
124  user { 'plapin':
125      ensure    => 'present',
```

```
126        comment   => 'P Lapin',
127        managehome => true,
128        password  => '!!',
129        groups    => 'sales',
130        shell     => '/bin/bash',
131        uid       => '3012',
132    }
133
134 user { 'shudson':
135        ensure    => 'present',
136        comment   => 'S Hudson',
137        managehome => true,
138        password  => '!!',
139        groups    => 'sales',
140        shell     => '/bin/bash',
141        uid       => '3013',
142    }
143
144 user { 'mpalmer':
145        ensure    => 'present',
146        comment   => 'M Palmer',
147        managehome => true,
148        password  => '!!',
149        shell     => '/bin/bash',
150        uid       => '3014',
151    }
152
153 user { 'cbratton':
154        ensure    => 'present',
155        comment   => 'C Bratton',
156        managehome => true,
157        password  => '!!',
158        shell     => '/bin/bash',
159        uid       => '3015',
160    }
161 user { 'mformanek':
162        ensure    => 'present',
163        comment   => 'M Formanek',
164        managehome => true,
165        password  => '!!',
166        shell     => '/bin/bash',
167        uid       => '251',
168    }
169
170 #Only for file server - Machine E
171
172    file { '/home/managers':
173        ensure => 'directory',
174        owner  => 'mscott',
175        group  => 'managers',
176        mode   => '3770',
177    }
178
179    file { '/home/accounting':
180        ensure => 'directory',
181        owner  => 'amartin',
182        group  => 'accounting',
183        mode   => '3770',
184    }
185
186    file { '/home/sales':
187        ensure => 'directory',
188        owner  => 'abernard',
189        group  => 'sales',
190        mode   => '3770',
191    }
```