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Notes for lab 4, Linux Admin

All puppet scripts will be listed at bottom but all notes will be at the top

Solutions according to problems:

1. Password Protection Policy: Passwords will be changed every 90 days. Previous passwords and similarities to them will not be allowed as new passwords. Passwords must contain 2 capital letters, 2 numbers ,1 non alphanumeric symbol and must be a length of at least 10 characters. No extra credits will be granted for these listed character types or lower case letters. Passwords should not be written down. If a password is to be stored some kind of encryption should be used. Do not use passwords that you use outside of company time. Passwords should be unique to your work account only
   a. E-Mail to Jim:
      Hello Jim,

      I received your request for admin privileges across all our servers but must deny that request on the basis of: a weak password. Your password does not follow our password protection policy which contains the requirements of 2 capital letters, 2 numbers ,1 non alphanumeric symbol and must be a length of at least 10 characters. Until your password is changed to meet all these requirements, your requests for admin privileges will be denied.

      Also, please try to use a password that is hard to guess. Usually a phrase that makes sense to you is best. Using the company name with numbers switched in for letters is bad practice, and may be grounds for continual denial even if your password meets our requirements.

      Best,
      Elmer Baca Holguin
2. To solve Meredith problems I essentially created a group called "ftp_coms" on machine c which she is a part of. In the sudoers file I allow "ftp_coms" group to run the command "/bin/systemctl restart vsftpd" on machine c with sudo and password.
   a. For directory "/var/ftp/" I made the owner root, and the group "ftp_coms".I gave the directory permissions 2770.
3. For Pam, Andy, and Keeley's problem, I created a group called "website" that they are all a part of. In the sudoers file I allow anyone in the website group to run "systemctl restart httpd" with sudo and their password.
   a. For the directory "/var/www/dundermifflin/" I make the owner root, the group "website" with mode 2775 so apache can still read and execute files.

4. Essentially what I did was comment out anything that set umask in /etc/profile and /etc/bashrc. I then used pam_umask to set the umask to 0007 in /etc/pam.d/sshd and /etc/pam.d/login. I did this across machines A, C, D and E
5. Just required an auth module pam_listfile.so, which used the file /etc/login.group.allowed to check if the user who is trying to login is part of a group that is allowed to login it. Only distributed this file into /etc/sshd. Might have been needed in /etc/system-auth to prevent users from being able to login in at console, but figured ssh is the important rule here.
6. Just used a puppet manifest to add myself and dwight to the "wheel" group, essentially allowing us to sudo
7. Made a puppet manifest for Micheal Scott. It adds four sudoers rules. 3 of them are just variants of each other. To ensure Micheal gives people at least 2 hours of warning for a shutdown, and a max shutdown notice of 24 hours and 9 minutes (just how it worked out) I just did "mscott ALL=/usr/sbin/shutdown +[1][2-9][0-9]" and "[2-9][0-9][0-9]" and also "[1][0-4][0-4][0-9]".
   a. The shutdown command was just done with 'mscott ALL=/usr/sbin/shutdown -c'
   b. This puppet manifest was distributed to all other machines and run
8. Just changed the /etc/security/pwquality.conf file so that minlen= 10, dcredit= -2, ucredit= -2, lcredit= 0, ocredit= -1. Then distributed this file to all other machines.

PUPPET MANIFEST FOR PROBLEMS
1. None

2. For Meredith
```
user { 'mpalmer':
     ensure => 'present',
     groups => 'ftp_coms',
     membership => 'minimum',
}

user { 'root':
     ensure => 'present',
}

group { 'ftp_coms':
     ensure => 'present',
}

class { 'sudo':
     purge            => false,
     config_file_replace => false,
}
```

#allows mpalmer to restart vsftpd on machine c

```
sudo::conf { 'ftp_coms':
      content => '%ftp_coms ALL=(ALL:ALL) /bin/systemctl restart vsftpd',
}

#allows mpalmer to read and write files in directory /var/ftp/
file { '/var/ftp/':
      ensure => directory,
      owner => 'root',
      group => 'ftp_coms',
      require => [ User['root'], Group['ftp_coms'], ],
      recurse => true,
      mode => 2770,
}

      3.  Website team (Andy, Pam, Kelley)
user { 'pbeesly':
      ensure => 'present',
      groups => 'website',
      membership => minimum,
}

user { 'kkapoor':
      ensure => 'present',
      groups => 'website',
      membership => minimum,
}

user { 'abernard':
      ensure => 'present',
      groups => 'website',
      membership => minimum,
}

user { 'root':
      ensure => 'present',
}

group { 'website':
      ensure => 'present',
}

class { 'sudo':
      purge => false,
```

```
        config_file_replace => false
}

#EX command for website team, FIX: path to http daemon
sudo::conf { 'website':
        content => '%website ALL=(ALL:ALL) /bin/systemctl restart httpd',
}

#this is for the website team
file { '/var/www/dundermifflin/':
        ensure => directory,
        owner => 'root',
        group => 'website',
        require => [ User['root'], Group['website'], ],
        mode => 2775
}
```

4. None
5. None
6. Sudoers file for Dwight and I

```
class { 'sudo':
        purge            => false,
        config_file_replace => false,
}

user { 'dschrute':
        ensure => 'present',
        groups => 'wheel',
        membership => 'minimum',
}

user { 'ebacahol':
        ensure => 'present',
        groups => 'wheel',
        membership => 'minimum',
}

sudo::conf { 'sudoers':
        content => '%wheel ALL=(ALL:ALL)  ALL',
}
```

7. Micheal Scott shutdown rules

```
class { 'sudo':
        purge            => false,
```

```
        config_file_replace => false,
}

user { 'root':
    ensure => 'present',
}

user { 'mscott':
    ensure => 'present',
}

sudo::conf { 'mscott_sd_1':
    content => 'mscott ALL=/usr/sbin/shutdown +[1][2-9][0-9]'
}

sudo::conf { 'mscott_sd_2':
    content => 'mscott ALL=/usr/sbin/shutdown +[2-9][0-9][0-9]'
}

sudo::conf { 'mscott_sd_3':
    content => 'mscott ALL=/usr/sbin/shutdown +[1][0-4][0-4][0-9]'
}

sudo::conf { 'mscott_sd_cancel':
    content => 'mscott ALL=/usr/sbin/shutdown -c'
}
```