

Cluster System Administrator Class
Bloominglabs
Setup centralized services

- I. FIRST! Protect ourselves and configure firewall
 1. Config file: /etc/sysconfig/iptables
 2. /etc/init.d/iptables start
 3. chkconfig iptables on

- II. NTP server, start, and set to start at boot
 1. Config file: /etc/ntp.conf

- III. Configure SLAPD (ldap server)
 1. Stop SLAPD (if necessary) and remove initial config:
 1. `rm -rf /etc/openldap/slapd.d`
 2. `rm -f /var/lib/ldap/*`

 2. Create default SLAPD config
 1. `cp /usr/share/openldap-servers/slapd.conf.obsolete /etc/openldap/slapd.conf`
 2. `cp /usr/share/openldap-servers/DB_CONFIG.example /var/lib/ldap/DB_CONFIG`

 3. Config file: /etc/openldap/slapd.conf

```
access to attrs=userPassword
    by self write
    by anonymous auth
    by * none

access to * by * read

suffix dc=cluster
rootdn cn=Manager,dc=cluster
rootpw {SSHA} (slappasswd)
password-hash {CRYPT}
password-crypt-salt-format "$6$%.16s"
```

 4. Start slapd and set to come up at boot time

 5. Install and configure LDAP client tools
 1. `yum install openldap-clients`
 2. Config file: /etc/openldap/ldap.conf

 6. Create root DN
 1. `ldapadd -D "cn=Manager,dc=cluster" -W -x -f root.ldif`

 7. Add user1 and set a password for the account
 1. `ldapadd -D "cn=Manager,dc=cluster" -W -x -f user1.ldif`
 2. `ldappasswd -D "cn=Manager,dc=cluster" -W -x -S "uid=user1,ou=Users,dc=cluster"`

IV. NFS

1. Start and set to come up at boot time
2. Config file: /etc/exports
3. exportfs -a
4. Create user1 home directory
 1. mkdir /home/user1
 2. chown user1:users /home/user1

V. SSH security

1. ssh keys (ssh-keygen)
2. authorized_keys
3. Config file: /root/.ssh/known_hosts
4. Modify ssh client on mgmt (VERY DANGEROUS)
 1. Config file: /etc/ssh/ssh_config
StrictHostChecking no

VI. Configure kickstart and re-install nodes

1. yum install system-config-kickstart
2. Config file: /var/www/html/ks2.cfg
 1. change root password
 2. ks2.cfg sets the following things:
 1. postscripts
 1. NFS client
 1. /etc/fstab
 2. NTP client config
 1. /etc/ntp.conf
 3. root ssh keys
 1. /root/.ssh/authorized_keys
3. Reinstall nodes
 1. LDAP client config
 1. Config file: /etc/nsswitch.conf
passwd: files ldap
shadow: files ldap
group: files ldap
 2. PAM
 1. Config file: /etc/pam_ldap.conf:
uri ldap://192.168.2.30
base dc=cluster
ssl no
pam_password md5
 2. Config file: /etc/pam.d/system-auth
 3. Config file: /etc/pam.d/password-auth
4. Configure nodes to boot from disk after installing
 1. Config files: /var/lib/tftpboot/pxelinux.cfg/install and /var/lib/tftpboot/pxelinux.cfg/localboot
 2. cd /var/lib/tftpboot; ln -s localboot 01-ma-ca-dd-re-ss-xx
5. Set default boot to localboot
 1. cd /var/lib/tftpboot; ln -s localboot default
6. Fix IP address in DHCP
 1. Config file: /etc/dhcp/dhcpd.conf