

# Creating a CManage VM

In order to create a CManage VM, you must have a 32bit processor, 1 gig of RAM, and 4GB of disk space.

## 1. Install Debian Lenny.

CManage appliances are built using Stanford's internal Debian-built system. For those outside of Stanford who wish to duplicate this process, a base Debian Lenny system will likely be equivalent.

## 2. Configure Debian.

For those using Stanford's internal build servers, begin with the following four steps:

- Remove all traces of pam afs session from the pam configs.
- Remove all the stanford bits from the /etc/ntp.conf.
- Make sure the /service directory was created properly.
- Check /etc/networking to ensure the system is set up for DHCP and that the network section in /etc/comanage/setup.ini is removed.

Log in on the console as root, and create `/etc/apt/apt.conf.d/20comanage`, containing this:

```
APT::Install-Recommends "false";
APT::Install-Suggests "false";
```

Edit `/etc/apt/sources.list` to match this:

```
deb http://ftp.us.debian.org/debian/ lenny main contrib non-free
deb-src http://ftp.us.debian.org/debian/ lenny main contrib non-free

deb http://security.debian.org/ lenny/updates main contrib non-free
deb-src http://security.debian.org/ lenny/updates main contrib non-free

# the repository for CManage test packages
deb http://exodus.stanford.edu/comanage stable main
```

Update the local APT cache:

```
# aptitude update
```

Install the CManage repository keyring (select "No Configuration" when prompted):

```
# aptitude install comanage-keyring
```

Install Sun's Java packages:

```
# aptitude install sun-java5-{bin,jdk,jre}
```

(Accept the Sun license when prompted)

Remove the user created during the install, if any:

```
# userdel USER
```



### Snapshot

This is the point where the VM is ready for the CManage packages, so you might want to create a snapshot.

## 3. Install the base CManage packages.

```
# aptitude install co-setup co-base co-grouper co-grouper-cli co-ldappc
```

(Just skip through the slapd configuration; when prompted, skip the grouper and ldappc configuration too)

After the installation completes, you should see the CManage info on the console:

```
CManage Virtual Appliance v0.1

Admin user: comanage

Admin password: bD3y_wuQ

Use ALT+CTRL+F1 to get a login prompt
Use ALT+CTRL+F7 to return to this screen

Dynamically Configured Networking:

MAC Address: 00:50:56:8b:6c:9a
IP Address: 171.66.7.31
Netmask: 255.255.255.0
Gateway: 171.66.7.1
Hostname: coval.stanford.edu
Domain: Stanford.EDU
DNS Servers: 171.64.7.99,171.64.7.77,171.64.7.55

Configure this appliance at https://coval.stanford.edu/
```

Perform the following cleanups:

- delete the cert and key (/etc/comanage/user.\*)
- delete the networking section from /etc/comanage/setup.ini
- delete /etc/cron.daily/tripwire

Power off the VM and export: From the VI Client, select the VM and then select File -> Virtual Appliance -> Export. Then bring in to VMware Converter to convert from OVF to VMX.

This is what I did to then take the half working VM and make it into a distributable alpha:

1. Ran through installer but skipped all the shib bits by going directly to infrastructure.php after the timezone setting.
2. chown the shibboleth2.xml file to be owned by www-data
3. Edit attribute-map.xml in /etc/shibboleth to uncomment out the LDAP bits
4. Start mysql
5. Start ldappc
6. Install unzip
7. Install the confluence and then co-confluence
8. Drop idp.xml from /var/lib/tomcat5.5/conf/Catalina/localhost/
9. Install co-sympa and run /install/sympa from web browser
10. create sympa mysql user and sympa database:  
create database sympa;  
grant all privileges on sympa.\* to sympa@localhost identified by 'comanage';  
flush privileges;
11. set /etc/sympa/facility to "local1" and add local1.\* /var/log/sympa.log to syslog.conf and restart sympa and syslog
12. edit /etc/apache2/conf.d/sympa and add:  
<Location /www/sso\_login>  
AuthName Sympa  
AuthType shibboleth  
ShibRequireSession on  
require mail ~ @  
</Location>
13. Install co-drupal and run /install/drupal6
14. Replace user.crt with a cert for localhost: openssl req -new -x509 -nodes -sha1 -days 365 -key user.key > user.crt  
(make sure file permissions don't change and file is still owned by comanage:www-data with user and group writable.)
15. Change /etc/hostname to something else (comanage-alpha for now)