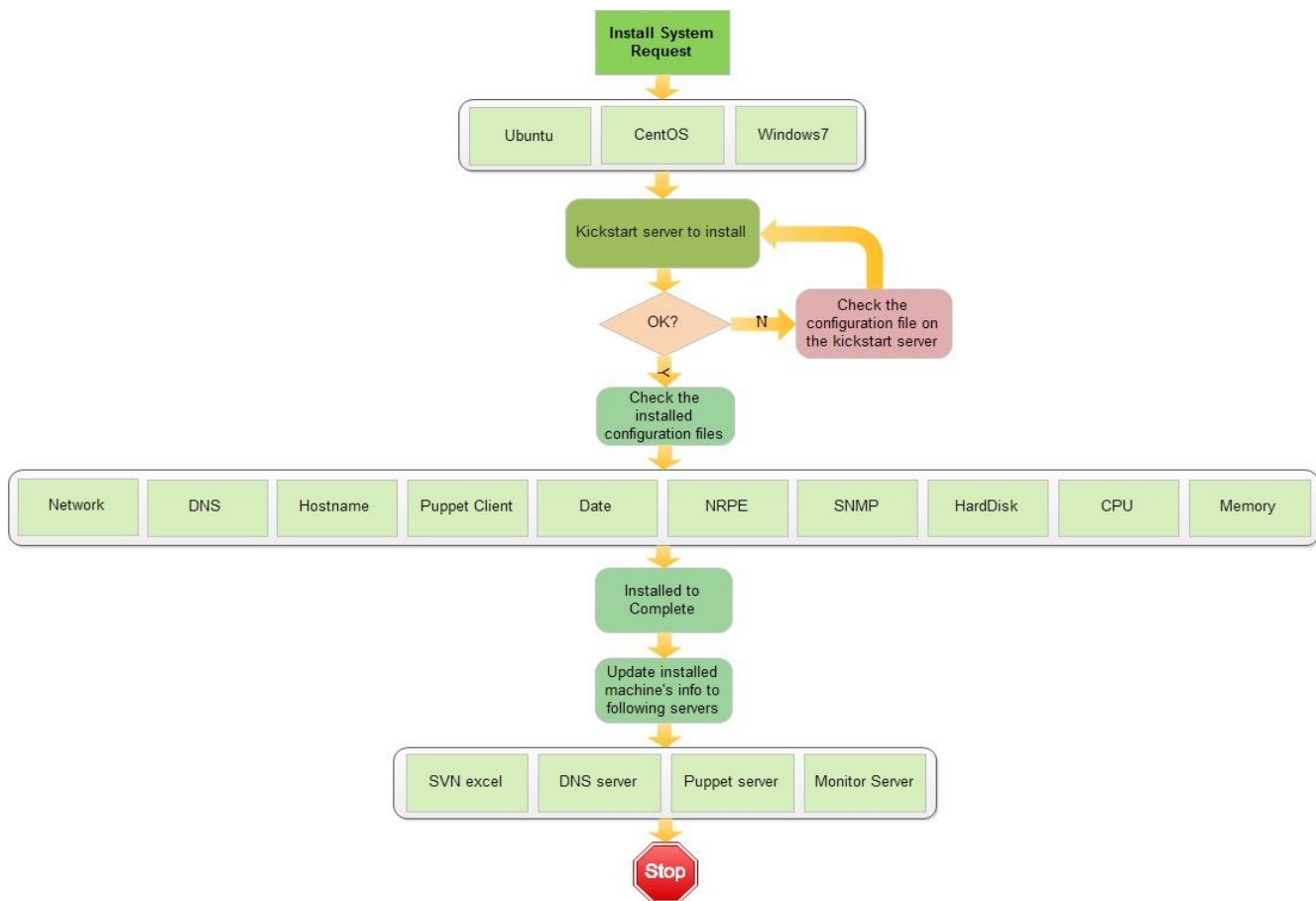


Regarding the install system flow



1. Install the Ubuntu system

```
[root@kvm14 ~]#virt-install -n omp-test01 -r 4096 --vcpus=4 --arch=x86_64 --os-type=linux --pxe --vnc --vncport=6942 --vnclisten=0.0.0.0 -f /dev/vg0/omp-test01 -w bridge=br0 --noautoconsole
```

2. Install the Centos system

Actual installation virtual machine example---Need to install a centos64 bit system, 12 GB of memory, 4 CPU in the physical machine (KVM15).

*The first step to login the kickstart server and Configured to install the information of the machine

*Please open the following link for how to edit the ks configuration file, only need to change the ip and the hostname is ok.

Lab: <http://192.168.107.61/ks/ks.php?ip=192.168.107.253&hostname=test01.cmrlab.com>

Chinachace: <http://192.168.80.5/ks/ks.php?ip=192.168.80.88&hostname=test01.tzidc.com>

*The second step to login physical machines need to install the virtual machine

```
[root@kvm15 ~]#pvcreate /dev/sdb1
```

```
[root@kvm15 ~]#vgcreate vg0 /dev/sdb1
```

```
[root@kvm15 ~]#lvcreate -L 100G -n agent01 /dev/vg0
[root@kvm15 ~]#virt-install -n agent01 -r 12288 --vcpus=4 --arch=x86_64 --os-type=linux -l
http://192.168.80.5/centos/64/x86_64/os --nographics -f /dev/vg0/agent01 -w bridge=br0 --accelerate
--extra-args='console=tty0 console=ttyS0,115200n8 ks=
http://192.168.107.61/ks/ks.php?ip=192.168.107.253&hostname=test01.cmrilab.com --connect qemu:///system'
[root@kvm15 ~]# virsh list
```

Id	Name	State
14	agent01	running

3. Install the Windows7 system

```
[root@kvm19 ~]#virt-install --connect qemu:///system -n loadrunner01 -r 4096 --vcpus=4 --disk=/dev/vg0/loadrunner01
--cdrom=/qemu/windows2003sp1.iso --vnc --vnclisten=192.168.107.44 --vncport=5903 --noautoconsole --os-type windows
--accelerate --network bridge=br0 --hvm --os-variant=win7
```

4. Kickstart Server

```
*Lab (192.168.107.61)
*Chinacache (192.168.80.5)
```

5. How to checking the configuration file on the kickstart server

6. Check the installed configuration file

```
*Network (/etc/sysconfig/network-scripts/ifcfg-eth0)
*DNS (/etc/resolv.conf)
*HostName (/etc/hosts)
*Puppet (/etc/init.d/puppet status)
*Nrpe (rpm -qa | grep nrpe)
*Snmp (rpm -qa | grep snmp)
*Cpu (/proc/cpuinfo)
*HardDisk (fdisk -l)
*Memory (/proc/meminfo)
*Date (ntpdate ntpserver's ipaddress)
```

There is a scripts can automatically check the basic information of the machine:

```
[root@admin01 check]# pwd
/var/www/html/check
[root@admin01 check]# ./check_system_info.py
Please enter the ip address of the need to check the system:192.168.107.62
=====NETWORK=====
DEVICE="eth0"
BOOTPROTO="static"
GATEWAY="192.168.107.1"
HOSTNAME="puppet01.cmrilab.com"
HWADDR="52:54:00:09:40:4B"
IPADDR="192.168.107.62"
MTU="1500"
NETMASK="255.255.255.0"
TYPE="Ethernet"
UUID="c5edf290-6498-4061-ad5d-0a6c9b86aae8"
```

```
ONBOOT="yes"
```

```
IPV6INIT="yes"
```

```
=====HOSTNAME/DNS=====
```

```
HOSTNAME=puppet01.cmrlab.com
```

```
nameserver 192.168.107.65
```

```
=====PUPPET/DATE=====
```

```
puppet (pid 14387) is running...
```

```
Tue May 13 16:19:28 CST 2014
```

```
=====NRPE/SNMP=====
```

```
nagios-nrpe-2.14-1.el6.rf.x86_64
```

```
net-snmp-5.5-44.el6.x86_64
```

```
net-snmp-utils-5.5-44.el6.x86_64
```

```
net-snmp-devel-5.5-44.el6.x86_64
```

```
net-snmp-libs-5.5-44.el6.x86_64
```

```
=====CPU/MEMORY=====
```

```
Processor:2
```

```
MemTotal:1922572kB
```

```
=====DISK=====
```

```
Disk /dev/sda: 53.7 GB, 53687091200 bytes
```

```
/dev/sda1 * 1 13 102400 83 Linux
```

```
/dev/sda2 13 6528 52325376 8e Linux LVM
```

```
Please enter the ip address of the need to check the system:
```

7. Updates are installing the machine's info to each server

*SVN server (<http://192.168.80.62/netops/>)

With SVN client to update the corresponding installation machine information

*DNS server (lab:192.168.107.65 chinachache:192.168.80.7)

According to the rules of the DNS server, add the forward and the reverse of the DNS

*Puppet server (lab:192.168.107.62 chinachache:192.168.80.8)

The first step to Certificate to sign:

```
[root@puppet01 classes]# puppet cert list
```

```
"agent01.ada.com" (SHA256)
```

```
22:59:8E:18:7B:3B:D6:F6:10:6A:88:EE:DF:8D:CD:E2:7D:7B:42:BD:FE:B2:A1:D2:2A:1F:F1:02:1F:B6:2D:F4
```

```
[root@puppet01 classes]# puppet cert sign agent01.ada.com
```

```
Notice: Signed certificate request for agent01.ada.com
```

```
Notice: Removing file Puppet::SSL::CertificateRequest agent01.ada.com at
```

```
'/etc/puppet/ssl/ca/requests/agent01.ada.com.pem'
```

The second step to configuration the puppet file:

```
[root@puppet01 classes]# pwd
```

```
/etc/puppet/manifests/classes
```

```
[root@puppet01 classes]# ls
nodes-kvm-aoi.pp  nodes-vm-aoi1.pp  nodes-vm-fpploc.pp  nodes-vm-omp.pp  nodes-vm-sso.pp
nodes-kvm-sys.pp  nodes-vm-aoi.pp  nodes-vm-inappbilling.com.pp  nodes-vm-open.pp  nodes-vm-sys.pp
nodes-vm-ada.pp  nodes-vm-apkprotect.pp  nodes-vm-internetplatform.pp  nodes-vm-oss.pp
```

```
[root@puppet01 classes]# vim nodes-vm-ada.pp
```

```
node 'agent01.ada.com' {
include users::netops
include users::dev_ada
include users::qa
include sudo
include ntp
include nagios-nrpe
include snmpd
}
```

More info about the Puppet , please click [here](#).

*Monitor server

Please open the following link for how to add monitoring:

<http://192.168.80.62/netops/%E4%BA%92%E8%81%94%E7%BD%91%E5%B9%B3%E5%8F%B0%E7%B3%BB%E7%BB%9F%E9%83%A8Nagios%E5%AE%89%E8%A3%85%E9%85%8D%E7%BD%AE%E6%89%8B%E5%86%8Cv0.1.0.doc>