

Cobbler

The Install Server

What is Cobbler

- Cobbler is an Install Server (batteries are included)
- DHCP server
- tftp server
- dns server
- web interface
- snippets, templates, system profiles

To install or image...

- Installs are slower?
 - CentOS installs in 4-5 minutes (blank image to running system in <8 mins)
 - Depending on how the image was created Xferring a 20GB image... much longer
- Images are
 - Old (require tweaking once up)
 - maintenance heavy
 - compressed?

How pxe works

- Set hardware to netboot
- During boot hardware gets IP address from DHCP server
- DHCP response also contains ip for next-server and a filename
- Hardware connects to next-server via tftp and retrieves filename
- Hardware begins executing file retrieved

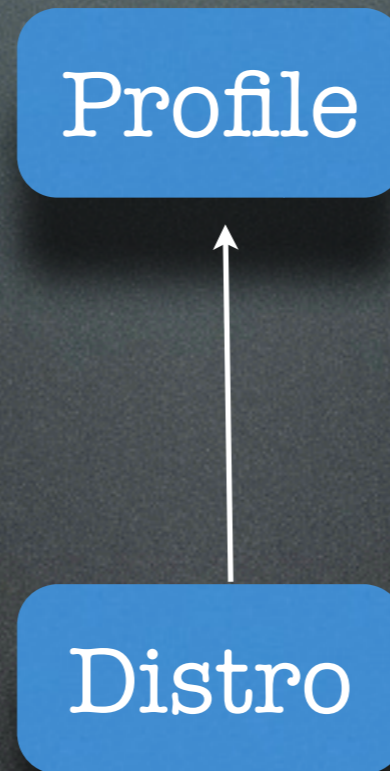
How cobbler Works

- sets up dhcp, tftp for pxe boot
- boots to pxelinux
- specifies installer kernel and initrd
- kernel arguments include a url to a kickstart(ks) file
 - kickstart is a pycheetah template
 - network config info
 - repository info
 - puppet registration
 - rhn registration
 - any other snippets that you can script

Demo - Import ISO

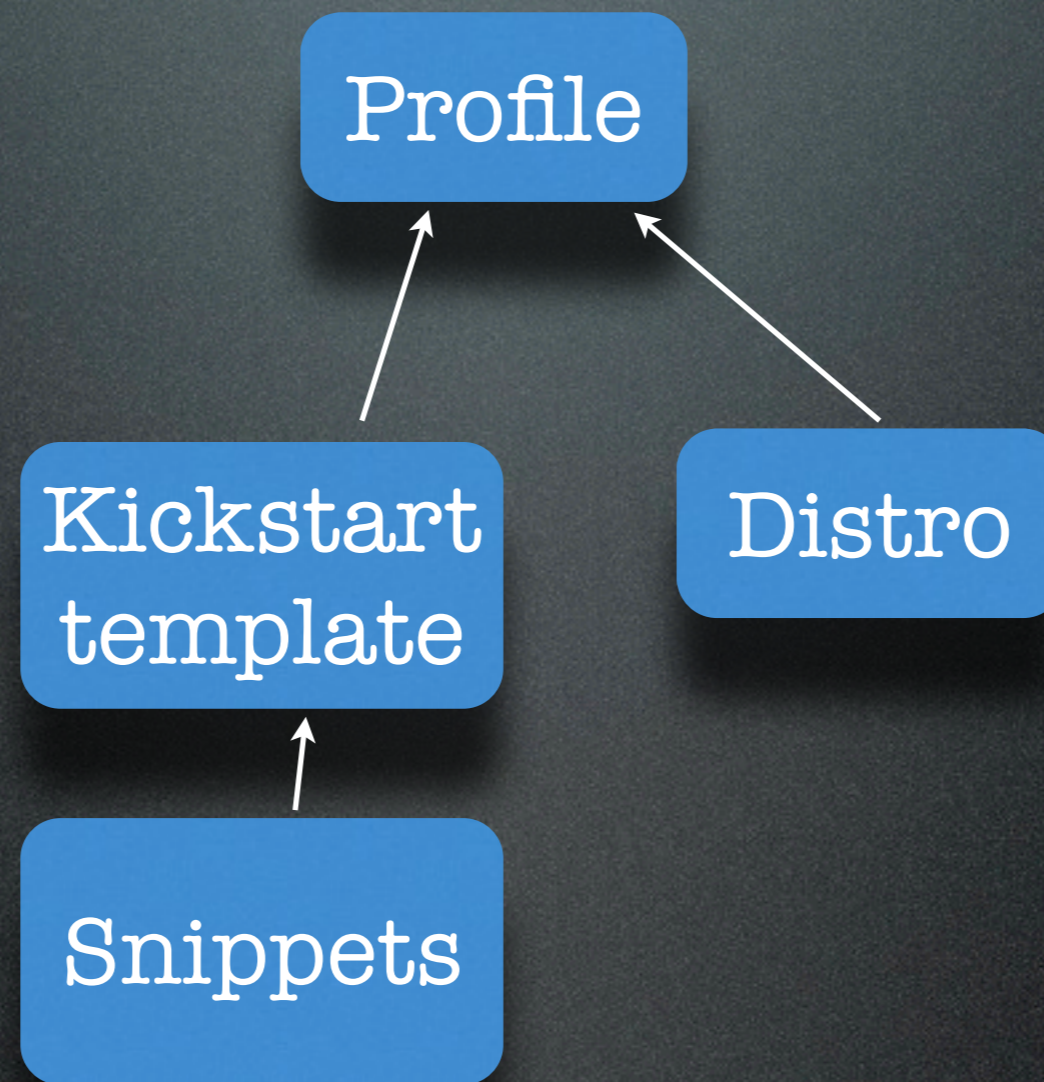
Cobbler Layout

Import ISO



Cobbler Layout

Create Kickstart Template



Demo - Boot Profile

What's going on?

Boot to Profile

- Standard PXE boot
 - Loads default profile selection menu
- Based on user's selection
 - Loads kernel, initrd
 - Basic kickstart
 - No hostname info, no static ip

Demo - Create System

Cobbler Layout

Create System

System

Profile

Distro

Kickstart
template

Snippets

What's going on?

Boot System

- Machine PXE boots
 - This time pxelinux loads a config file specific to the machine (based on the machine's mac address)
 - pxelinux config file has info for
 - kernel
 - initrd
 - kickstart specific to the system

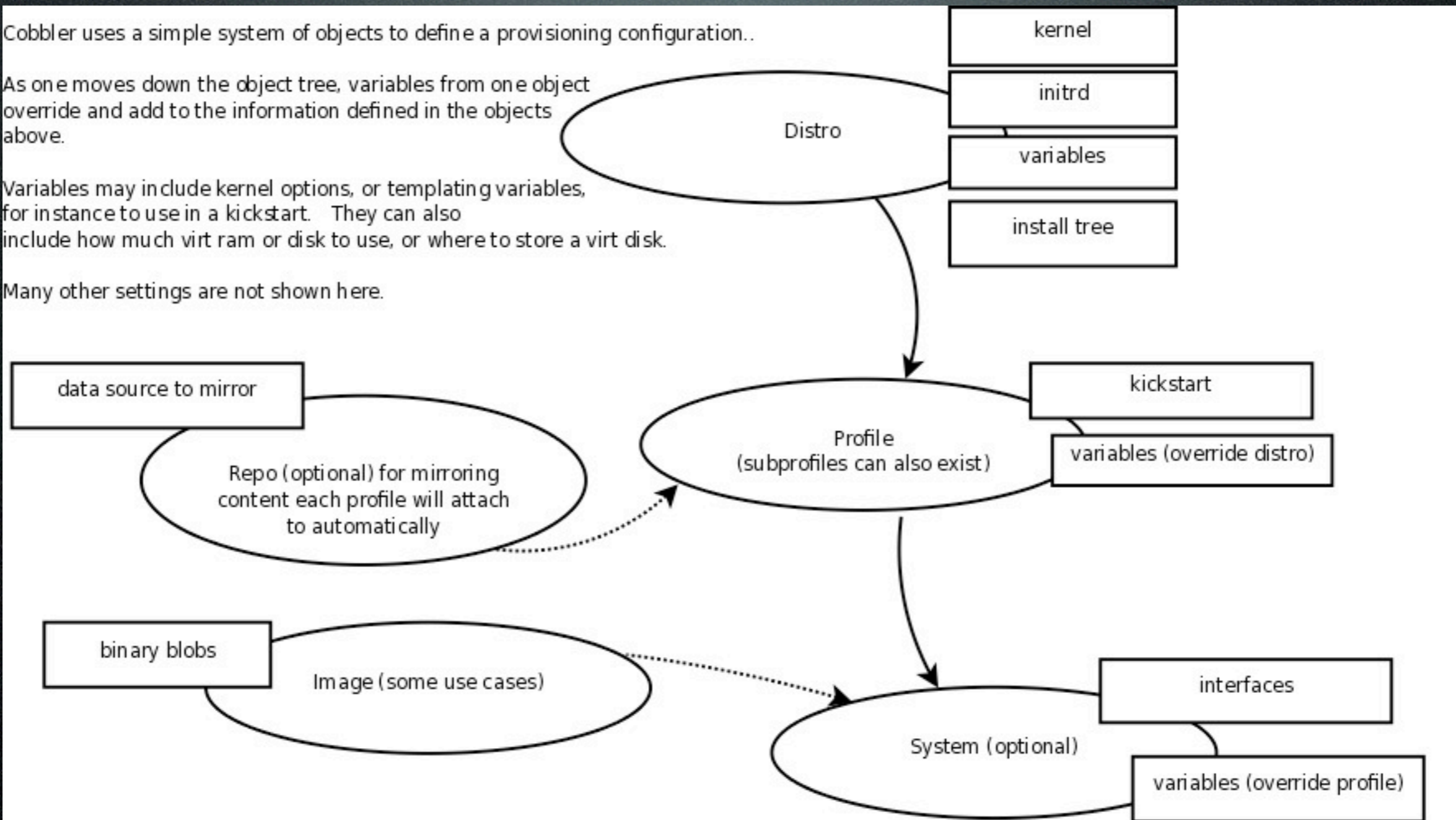
Cobbler Layout

Cobbler uses a simple system of objects to define a provisioning configuration..

As one moves down the object tree, variables from one object override and add to the information defined in the objects above.

Variables may include kernel options, or templating variables, for instance to use in a kickstart. They can also include how much virt ram or disk to use, or where to store a virt disk.

Many other settings are not shown here.



The End