

Foreman Provisioning

Emerson Ford

What is Foreman?

Use Cases for Foreman

Custom iPXE Image

Near vanilla iPXE image with the following embedded script:

```
#!/ipxe
# Intermediate iPXE script to report MAC address to Foreman

:net0
isset ${net0/mac} || goto no_nic
dhcp net0 || goto net1
chain http://fm-test.chpc.utah.edu/unattended/iPXE?mac=${net0/mac} || goto net1

:net1
isset ${net1/mac} || goto no_nic
dhcp net1 || goto net2
chain http://fm-test.chpc.utah.edu/unattended/iPXE?mac=${net1/mac} || goto net2

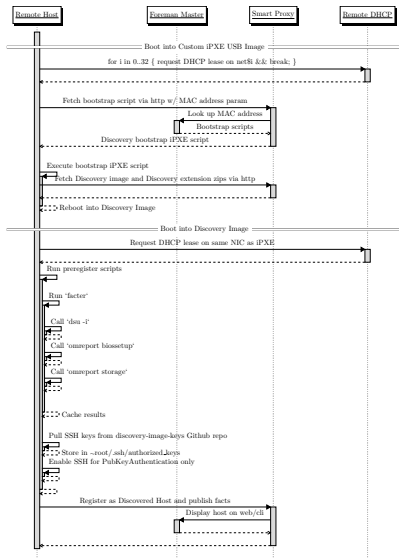
...

:net33
goto no_nic

exit 0

:no_nic
echo Failed to chainload from any network interface
sleep 30
exit 1
```

Foreman iPXE Workflow

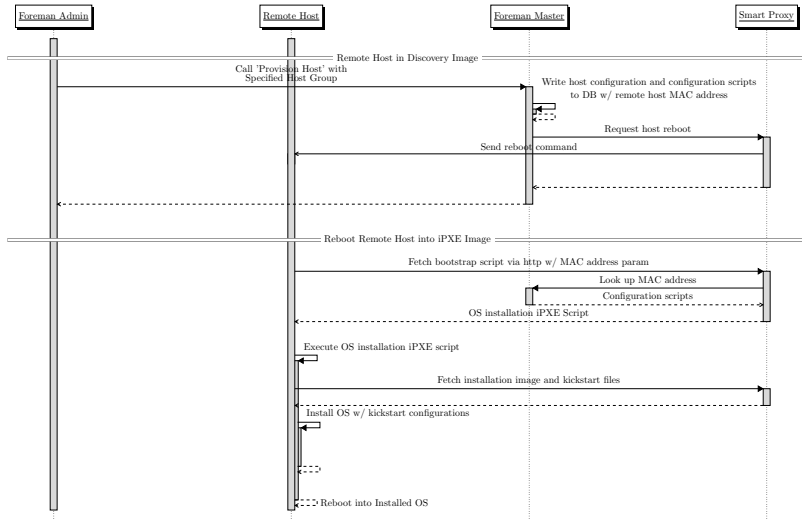


Boot into Custom iPXE Image can happen in two ways:

- ▶ USB boot with custom iPXE image.
- ▶ PXE boot into custom iPXE image (configure DHCP):

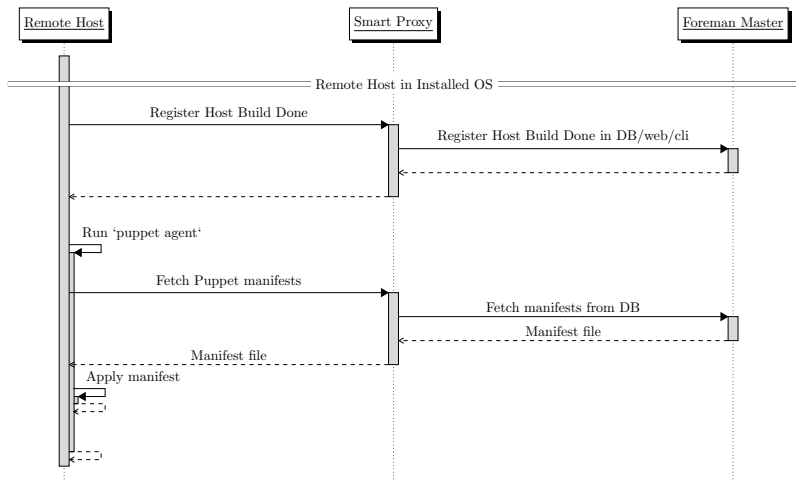
```
if exists user-class and option user-class = "iPXE" {
    filename "http://fm-test.chpc.utah.edu/unattended/iPXE?bootstrap=1";
}
elseif option architecture = 00:06 {
    filename "ipxe.efi";
}
elseif option architecture = 00:07 {
    filename "ipxe.efi";
}
elseif option architecture = 00:09 {
    filename "ipxe.efi";
}
else {
    filename "undionly.0";
}
```

Foreman Installation Workflow



Foreman supports kickstart files (RedHat), preseeds files (Debian), etc.

Foreman Configuration Workflow



Foreman comes with Puppet by default but can be configured with Ansible, SaltStack, etc.