Introduction To Foreman
A Life-cycle Management Application

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What do you know about Foreman ?

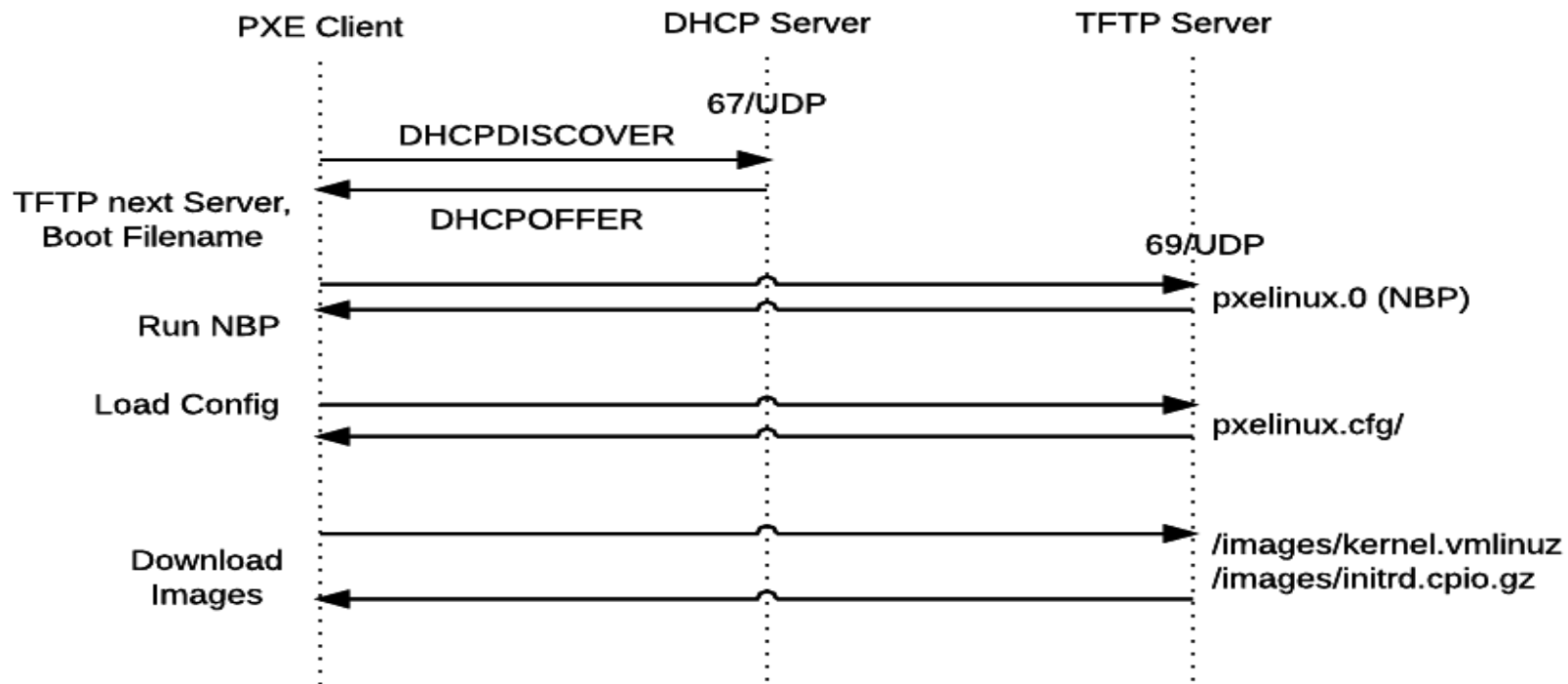# What is Life Cycle Management ?

- Installation
- Management the state of system which could be packages, configuration or services
- Update, upgrade or decommission

Use cases of system installation ?

Installation

- Foreman supports both PXE and PXELess installations,
  - Installation using PXE. This requires DHCP, TFTP
  - Installation without PXE(PXELess)

PXE Installation

PXE Client   DHCP Server   TFTP Server

67/UDP

DHCPDISCOVER

TFTP next Server,
Boot Filename

DHCPOFFER

69/UDP

pxelinux.0 (NBP)

Run NBP

Load Config

pxelinux.cfg/

Download
Images

/images/kernel.vmlinuz
/images/initrd.cpio.gz

PXELess Installation

- Installation using Foreman bootdisks
- Installing with the help of Foreman Discovery

Use cases of system management ?

System Management

- Repositories
  - Supports yum, file, docker, puppet type repositories
- Service and/or Configuration Management
  - Has remote execution, Puppet, Ansible integration.
- Vulnerability or compliance management
  - Uses OpenScap, Red Hat Access Insights

Upgrade or decommission

- Upgrade system to next major release
- Reinstall system if required
- Fully decommission system and delete all associated resources

Where you can use Foreman ?

- Theoretically there is no limit on how may systems Foreman can manage, it can be deployed for small lab which has 5 systems to huge scale which has 50000 systems

- Bare Metal or Physical systems
- Virtual Systems
- AWS Cloud
- Google Compute Engine
- Microsoft Azure
- OpenStack

Any Questions ?

- Visit us http://theforeman.org/
- You can find us:
  - IRC: irc.freenode.net
  - #theforeman
  - #theforeman-dev
- Reach out to us at Foreman discourse
  - https://community.theforeman.org/