

# Oracle Linux 7: What's New for Administrators

## **Course Introduction**

- Course Goals
- Course Schedule
- Virtualization with Oracle VM Server for x86
- Classroom System Configuration

## **Installing Oracle Linux 7**

- Obtain Oracle Linux
- Anaconda installer
- Install Oracle Linux 7
- Upgrade from Oracle Linux 6

## **Oracle Linux 7 Boot Process**

- GRUB 2 Bootloader
- systemd System and Service Manager
- systemd Service Units
- systemd Target Units
- systemctl Utility

## **Network Configuration**

- Network Interface Configuration Files
- NetworkManager
- nmcli Utility
- ip Utility

## **System Configuration**

- Configuring System Date and Time
- timedatectl Utility
- Network Time Protocol (NTP)
- Configuring NTP by using Chrony

## **Advanced Software Package Management**

- Popular Yum Plug-Ins
- Managing Errata
- PackageKit Software Update
- The Enhanced Ksplice Client

## **Storage Administration**

- LVM thin provisioning
- Snapper
- System Storage Manager (SSM)
- iSCSI
- Udev

## **Security Administration**

- Packet-Filtering Firewalls
- firewalld Service
- firewall-cmd Utility

## **System Logging**

- Oracle Linux 7 system logging options
- journald Service
- journalctl Utility

## **OpenLDAP**

- Configuring an OpenLDAP server
- Implementing OpenLDAP authentication
- Authenticating from an OpenLDAP client

## **Control Groups (Cgroups)**

- Cgroup Integration into systemd
- systemd slice units and scope units
- Controlling Access to System Resources

## **Docker**

- Introduction to Docker
- Docker Images and Docker Containers
- Docker Hub Registry
- Docker Command-Line Interface

## **Advanced Networking**

- Network Bonding
- Virtual Local Area Networks (VLANs)
- Virtual Private Networks (VPNs)