Advanced Ubuntu server administration
Learn from the best

You’ve been using Ubuntu Server for a while and want to advance your skills. The Ubuntu Advanced Server course is an intensive three-day hands-on course in which you will learn and use advanced techniques.

The training course covers a variety of topics with labs to reinforce the concepts learned. The course begins with the setup of a virtual machine that you will use for the labs.

Schedule:
Three days of lecture and labs

Level required:
Experienced Linux and cloud professionals
Advanced Ubuntu server administration

Students should complete the course with a comprehension of the following lessons:

Section 1: OpenSSH
- What is SSH?
- What is the Kernel?
- SSH Keys
- SSH Tools

Section 2: Virtualization lab setup
- What is Virtualization?
- What is KVM?
- QEMU-img

Section 3: System Initialization
- What is Grub2?
- Advanced systemd Usage
- On-Demand Processes
- HWE

Section 4: Advanced Filesystem Concepts
- The setuid and setgid Bits
- Sticky Bits
- Filesystem Basics
  - Inodes
  - Superblocks
- XFS

Section 5: Storage
- RAID
- Managing a Software RAID
- Software RAID Drive Failures
- Device Mapper Multipathing

Section 6: ZFS
- ZFS Overview
- ZFS Architecture
- ZFS Pools
- Configuring and Tuning ZFS
- ZFS Snapshots
Section 7: Advanced Networking Concepts

- Linux Bridges
- Network Interface Bonding
- VLANs
- Bond Configuration
- Bridge Configuration

Section 8: Security

- Pluggable Authentication Modules (PAM)
- PAM Architecture
- PAM Modules
- PAM Configuration
- PAM Modules

Section 9: Snappy

- Snaps
- Ubuntu Core
- Ubuntu Core

Section 10: LXD

- What is LXD?
- LXD Setup
- Creating and Using a Container
- LXD Setup
- Creating and Using a Container

Appendix

- Time Synchronization
- Rsyslog
- AppArmor
- AppArmor Parser
- AppArmor Profiles

Ubuntu Core | High availability architecture