

Hands-on course , 3  
day(s)  
Ref : UXO

### Pre-requisites

The students should have  
a solid knowledge of Unix/  
Linux system administration  
(equivalent to a XAU training).

### Next sessions

# Unix: Advanced Administration

## OBJECTIVES

*This training will improve your system administration skills under a Unix/Linux system. You will be able to properly tune your system as well as to manage them efficiently.*

### 1) Performance

### 2) System Configuration

### 3) Advanced Network Administration

### 4) High Availability Services and Unix Deployment

## 1) Performance

- Performance : analysis, resolution method.
- Managing system activity.
- Monitoring system load.
- Managing CPU load : single and multi processor analysis.
- Managing memory pressure : paging, memory, swap.
- Managing disk activity : bottlenecks, RAID solutions.
- Managing network : collision detection, bandwidth management.
- Managing application tuning : examples with a web server, Oracle.

## 2) System Configuration

- Checking kernel parameters.
- Accounting setup.
- C2 security setup.
- Using ssh and sudo to improve system security.

## 3) Advanced Network Administration

- TCP/IP setup.
- Netmasks setup.
- Managing DNS/BIND setup.
- Managing DHCP.
- Routing setup.
- Using a firewall : ipfilter.
- Using syslog. Managing syslogd.

## 4) High Availability Services and Unix Deployment

- Features of a HA Cluster.
- Deploying a HA Cluster.
- Managing HA NFS.
- Managing HA Apache.
- How to deploy a Unix/Linux Solution through the network.