Advanced Linux (network servers) - 3 days

1. **DNS Concepts**
   -Naming Services
   -A Better Way
   -The Domain Name Space
   -Delegation and Zones
   -Server Roles
   -Resolving Names
   -Resolving IP Adresses
   -BIND Administration
   -rndc Key Configuration
   -Configuring the Resolver
   -Testing Resolution

2. **Configuring BIND**
   -BIND Configuration Files
   -named.conf
   -Creating a Site-Wide Cache
   -Zones In named.conf
   -Zone Database File Syntax
   -SOA – Start of Authority
   -A & PTR – Adress & Pointer
   -NS
   -CNAME & MX
   -Abbreviations and Gotchas
   -$ORIGIN and $GENERATE

3. **Creating DNS hierarchies**
   -Subdomains and Delegation
   -Subdomains
   -Delegating Zones
   -in-addr.arpa. Delegation
   -Issues with in-addr.arpa.

4. **Securing BIND and DNS**
   -Split Namespaces
   -Using Views with BIND9
   -Address Match Lists & ACLs
   -Restricting Queries
   -Restricting Zone Transfers
   -Running BIND in chroot jail
   -Dynamic DNS Concepts
   -Allowing Dynamics DNS Updates
   -DDNS Administration with nsupdate
   -Common Problems

5. **Configure DHCP Server**

-The /etc/sysconfig/dhcpd Configuration File
-The /etc/dhcpd.conf Configuration File
-Assign Fixed Addresses
-Configure DHCP Pools
-Use Classes

6. Configure DHCP Client

-/etc/sysconfig/network/ directory

7. Configure DHCP Relay Server

8. Use DHCP and Dynamic DNS

-The Client Transmits Its Name to the DHCP Server
-The DHCP Server Assigns a Name to the Client

9. Configure DHCP Failover

-Basics of DHCP Failover
-Configure Failover

10. Troubleshoot DHCP

-hcping
-dhcpdump

11. Enable Fundamental Network Services

-Enable the Extended Internet Daemon **(xinetd**)
--What **xinetd** Is
--Manage **xinetd** Manually

-Enable an **FTP Server**
--The Role of an **FTP** Server
--How FTP Works
--Advantages of **PureFTPd** Server
--Install and Run **PureFTPd** Server
--Configure **PureFTPd** Server
--Manage **PureFTPd** Logs

-Configure **Time** on SUSE Linux Enterprise Server
--Fundamental Concepts
--Synchronize Time with netdate and hwclock

--The Network Time Protocol (**NTP**)
--Synchronize Time with **NTP**

-Configure **NFS** (Network File System)
--Set up and Manage Network File System (**NFS**)