ARYATECHNO

Learn CentOS Operating system

Topics : Centos Server
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1. **Introduction to Linux and CentOS**:

   - Overview of Linux distributions
   - Introduction to CentOS and its history
   - Understanding the CentOS release cycle

2. **Installation and Configuration**:

   - Installing CentOS on a physical machine or virtual environment
   - Basic system configuration tasks such as setting hostname, network configuration, etc.
   - Disk partitioning and file system management
   - Understanding package management with yum or dnf

3. **User and Group Management**:

   - Creating and managing users and groups
   - Understanding file permissions and ownership
   - Implementing user access control and security

4. **File System Administration**:

   - Working with files and directories
   - Managing file system quotas
   - Disk management and monitoring

5. **Networking**:

   - Configuring network interfaces
   - Firewall configuration using iptables or firewalld
   - Understanding network services like DNS, DHCP, etc.

6. **Security**:

   - Implementing security best practices
   - Configuring SELinux
   - Managing user authentication and passwords

7. **System Monitoring and Performance Tuning**:

   - Monitoring system performance using tools like top, vmstat, sar, etc.

- Identifying and troubleshooting performance issues
- Tuning system parameters for better performance

8. **Shell Scripting**:

   - Basics of shell scripting
   - Writing simple scripts to automate tasks
   - Understanding variables, loops, conditionals, etc.

9. **Virtualization and Containerization**:

   - Introduction to virtualization concepts
   - Managing virtual machines with tools like KVM or VirtualBox
   - Introduction to containerization with Docker or Podman

10. **High Availability and Clustering**:

    - Introduction to high availability concepts
    - Configuring clustering solutions like Pacemaker and Corosync
    - Implementing failover and load balancing

11. **Backup and Recovery**:

    - Planning and implementing backup strategies
    - Understanding tools and utilities for backup and recovery
    - Testing backup and recovery procedures

12. **Advanced Topics** (Optional):

    - Setting up web servers, databases, or other services
    - Working with automation tools like Ansible
    - Exploring cloud integration with CentOS