# **INFOSOFT IT SOLUTIONS**

## **Training | Projects | Placements**

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# **AIX System Administration**

#### **Introduction to AIX**

- Overview of AIX operating system
- History and evolution of AIX
- Features and advantages of AIX compared to other UNIX/Linux systems

# **AIX Installation and Configuration**

- System requirements and hardware compatibility
- Installation methods (installation media, network installation)
- Post-installation tasks and initial system setup

## **AIX File Systems and Storage Management**

- Understanding AIX file system concepts (JFS, JFS2, GPFS)
- Creating and managing file systems (mkfs, mount, umount)
- Logical Volume Manager (LVM) configuration and management

# **User and Group Administration**

- Managing users and groups (useradd, usermod, userdel)
- Role-based access control (RBAC) and permissions
- Password management and security policies

## **AIX System Management**

- System startup and shutdown procedures
- Managing system resources (CPU, memory, disk I/O)
- Monitoring system performance (vmstat, iostat, topas)

## **Networking in AIX**

- Configuring network interfaces (ifconfig, entstat)
- TCP/IP networking fundamentals
- Network troubleshooting and diagnostics (ping, traceroute, netstat)

### **Backup and Recovery**

- Backup strategies and tools (smitty, backup)
- Restoring files and system from backup (restore)
- AIX system backups and disaster recovery planning

## **AIX Security**

- Securing AIX systems (permissions, access control)
- Configuring firewall and network security (iptables)
- Implementing user authentication and encryption (ssh, Kerberos)

# **AIX Patch Management and Software Installation**

- Applying AIX updates and patches (installp)
- Software package management (rpm, yum)
- Managing software dependencies and libraries

#### Virtualization in AIX

- Introduction to AIX virtualization technologies (PowerVM)
- Creating and managing virtualized environments (LPARs)

Resource allocation and performance tuning for virtual machines

## **High Availability and Clustering**

- Configuring high availability solutions (HACMP/PowerHA)
- Implementing failover and load balancing

## **System Monitoring and Logging**

- AIX system monitoring tools (nmon, sar)
- Analyzing system logs (errpt, syslog)
- Performance tuning and optimization techniques

## **Shell Scripting and Automation**

- Introduction to AIX shell scripting (ksh, bash)
- Automating system administration tasks
- Creating and scheduling cron jobs

# **Backup and Recovery Strategies**

- Implementing backup policies and schedules
- Disaster recovery planning and testing
- Backup verification and monitoring

# **Compliance and Security**

- Implementing security best practices (auditing, logging)
- Compliance with industry standards (PCI DSS, HIPAA)
- Incident response and handling security breaches

# **Advanced AIX Topics**

- Performance tuning and optimization
- Kernel customization and tuning
- Troubleshooting complex issues (dump analysis, system hangs)

## **AIX Networking**

- TCP/IP configuration and troubleshooting
- DNS, DHCP, and LDAP integration
- Network file sharing (NFS) and SAMBA configuration

## **Managing AIX in Enterprise Environments**

- Scaling AIX systems for enterprise applications
- Integration with enterprise storage solutions (SAN/NAS)
- Managing AIX in cloud environments (AIX on Power Systems Cloud)

## **Emerging Technologies and Trends**

- AIX in hybrid cloud and container environments
- Integration with DevOps and automation tools
- Future developments and roadmap for AIX

## **Professional Development and Certification**

- Training resources and certification programs
- Continuing education and skills enhancement
- Career opportunities for AIX system administrators