Dheeraj Kumar Sengar

Public Cloud and Linux Administrator

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PROFILE

Certified Azure Administrator (AZ-104), AWS Cloud Practitioner, and Linux Systems Engineer with over 3 years of experience in managing scalable cloud infrastructure, implementing disaster recovery solutions, and optimizing Linux environments. Skilled in automation, high-availability architectures, and secure system administration.

PROFESSIONAL EXPERIENCE

System Administrator, Tata Consultancy Services

2021 – present | Gurgaon, India

Project 1: Polaris (2022 - Present)

- Implemented **Azure Site Recovery (ASR)** to configure failover protection for virtual machines across paired regions, ensuring **99.99% uptime**, reducing recovery times by 50% during system failures.
- Changed login ports to 222 for users, restricted access to specific interfaces (ListenAddress), and enforced session timeouts (ClientAliveInterval) to enhance Linux security using OpenSSH and SELinux.
- Configured **secure FTP services** using vsFTPd on Red Hat Linux for seamless file transfers between Linux and Windows servers.
- Configured **NFS** on Red Hat Linux and shared with the Polaris team for seamless project file access across developers within a specific subnet.
- Cloned and tested a customer-provided Docker image locally. Uploaded it to Azure Container Registry for deployment and stored a backup copy in Azure Storage Account. Verified functionality using Azure Container Instances.
- Automated data backups with **rsync and crontab**, reducing manual effort and increasing efficiency by **50%**.
- Configured **Azure Load Balancer** with NAT to enable port forwarding, directing incoming traffic to a specific VM using a designated IP and port
- Configured Application Load Balancer for path-based routing to efficiently manage external traffic distribution
- Optimized system redundancy by implementing **Striped** and **Mirrored** volumes using LVM, enhancing read/write performance by **30%**.
- Proficient in managing **storage operations** on SUSE and Red Hat machines, including disk partitioning, filesystem creation, mounting, and disk management in Linux environments.
- **Exported and imported volume groups** using Logical Volume Management (LVM) to ensure safe transfer of logical volumes between systems, preventing data loss or corruption.
- Performed patching activities on Red Hat Linux, including package installation, version **downgrades**, package lock/unlock, and kernel version management.
- Managed users and groups in **Azure Entra ID**, created administrative units for group management, and set up custom domains for user creation and management.
- Managed user accounts (addition, deletion, aging) and permissions, as well as local and AD group management on Linux servers
- Configured backup and restore operations (full, incremental, and differential) for the filesystem on Red Hat Linux.
- Recovered files from VM backup snapshots and unmounted the filesystem to ensure safe data restoration.
- Enhanced cross-VM communication with Virtual Network Peering, reducing inter-network latency by 20%.
- Successfully mounted Azure **File Share** on both **Windows** and **Linux** servers, enabling permanent access to synchronized files.
- Administering the **MOVEit tool** to ensure uninterrupted user access and optimal file-sharing functionality.

Project 2: IPSEN Pharma SAS (2021 - Present)

- Deployed **Virtual Machine Scale Sets** to automatically manage scaling based on CPU/memory utilization, improving resource utilization efficiency by 40% during peak workloads.
- Configured **Azure Disk Encryption** for enhanced security of OS, data, and temporary disks, managing keys through Azure Key Vault.
- Designed and implemented **S3 bucket lifecycle policies**, achieving **20% cost savings** by automating data tiering.
- Redeployed a Virtual Machine to a healthy physical host and shared disks across multiple VMs for data synchronization on Windows servers.
- Managed **Azure App Services** and App Service Plans, including backup and restoration on-demand, to ensure high availability.
- Administered user accounts by managing creation, deletion, aging policies, and permissions, along with handling local and AD group configurations on Linux servers.
- Managed user accounts, configured ACL permissions, used the find command for file searches, monitored system performance, handled kernel modules, and debugged open file issues with the lsof command.
- Provisioned and managed **Elastic Block Store (EBS)** volumes to provide persistent block-level storage for EC2 instances in AWS environments.
- Configured backup for Azure storage account **file share** and **restored deleted files** from the source location.
- Created a **Lifecycle Management rule** to transition blobs to the cool storage tier, optimizing cost efficiency in Azure.
- Set up **blob storage replication** to move data across regions, enhancing disaster recovery capabilities.
- Configured service endpoint and private endpoints to securely connect to Azure services within specified subnets/virtual networks.
- Provisioned and managed **EC2 instances**, configuring security groups, **IAM roles**, and instance types for robust security and optimal performance in AWS environments.
- Configured Custom DNS Name for Azure App Service to enhance brand identity and accessibility for end-users, managing DNS records for proper domain resolution on Azure App Service.
- Automated batch processes using Dollar-U application, saving 8 hours weekly in manual operations...

SKILLS

- **Cloud Platforms**: Microsoft Azure (VM, Storage Accounts, Azure AD, Azure Backup, File Share (Storage Sync Service), Key Vault, App Services, ASR, Azure Monitor, AZ Copy), AWS (EC2, S3, EBS, IAM, CloudWatch).
- Linux Administration: Linux (Red Hat, SUSE), Shell scripting, Performance tuning, NFS and FTP.
- Containers and Orchestration: Docker, Azure Container Registry (ACR), Azure Container Instances (ACI), Kubernetes
- **Programming**: Bash, PowerShell.
- Networking: Virtual Network, Load Balancers, Application Gateway, Subnetting, NSG.
- Monitoring: Azure Monitor, CloudWatch.

EDUCATION

Bachelor of Technology in Computer Science Engineering

2017 - 2021

IKGPTU Main Campus, Kapurthala, Punjab

CERTIFICATES

- Microsoft Azure Administrator (AZ-104)
- AWS Cloud Practitioner
- Red Hat Certified System Administrator (RHCSA) (In Progress)

ACTIVITIES AND ACHIEVEMENTS

- Member of the National Service Scheme (NSS) at IKGPTU; led community service initiatives.
- Winner of inter-school Kabaddi competition, showcasing leadership and teamwork.
- Organized and participated in a 7-day NSS camp, demonstrating strong organizational skills.