Manmeet Singh

LinkedIn | GitHub | Portfolio | manmeet1515@gmail.com | Location: Perth | +61 405 174 493

Professional Summary:

I'm a Systems Administrator with hands-on experience in AWS, Azure, and Terraform, focusing on automating cloud infrastructure and improving system reliability. I have hands-on experience with a broad range of AWS and Azure services and am well-versed in leveraging them to optimize cloud infrastructure and operations. I enjoy learning new technologies and contributing to cloud transformation projects, especially in large enterprise environments.

Technical Skills:

- **Cloud Platform:** AWS & Azure
  - **Compute & Storage:** AWS EC2, S3, VPCs | Azure VMs, Blob Storage, VNets
  - **Security & Access:** AWS IAM, Certificate Manager | Azure AD
  - **Monitoring & Alerts:** AWS CloudWatch, SNS | Azure Monitor, Log Analytics, Action Groups
  - **Multi-Account Management:** AWS Control Tower, AWS Organizations | Azure Management Groups, Landing Zones
  - **Networking & DNS:** AWS Route 53 | Azure DNS
  - **Cost Optimization:** AWS Budgets & Cost Explorer | Azure Cost Management & Budgets

- **Software as a Service:** Google workspace
  - Managed user accounts, groups, and domain settings in Google Admin Console for a seamless organizational workflow.
  - Configured Gmail routing, filtering rules, and security policies.
  - Administered DNS and MX records.

- **Infrastructure as Code:** Terraform
  - Familiar with modules, state management, and Terraform Cloud for remote operations.
  - Terraform scripts and configuration files to provision cloud resources.

- **Version Control:** Git, GitHub
  - Familiarity with Git commands. I used git all through the AWS projects.
  - Familiarity with Managing GitHub repositories and secrets management.

- **Scripting and Automation:** Bash Scripting.
  - Experience with using Bash scripting in conjunction with Cron jobs for scheduling tasks.

- **Operating Systems:** Linux (Ubuntu, Amazon Linux,RHEL):
  - Comfortable with Linux command line, managing users and permissions.
  - Experience with package management (apt, yum), process monitoring (top, htop), and service management (systemctl).

- **Networking:**
  - TCP/IP, DNS, DHCP, Load Balancing.
  - Experience with Fortinet and Cisco suite of products.

- **CI/CD:** GitHub Actions, AWS Code Pipeline
  - Familiar with workflows, actions, and secrets management to ensure secure and efficient deployment processes. I used it for the to-do application project.
  - Familiar with AWS Code Pipeline to automate end-to-end software release processes. I used it to integrate with GitHub and S3 for my Tech Portfolio project.

- **Containerization:** Docker
  - Familiar with creating and managing Docker containers, writing Dockerfile, and optimizing container images.

- **Python**: Familiar with libraries such as Boto3, for interacting with AWS services.

Projects:

- **Cisco to Aruba Network Refresh**:

  - Deployed Aruba switches and APs across legacy Cisco sites.
  - Configured devices using standard templates and extended networks where hybrid deployments were needed.
  - The refresh improved wireless coverage, reduced dropouts, and delivered more consistent network performance across high-traffic business areas.

- **SD-WAN Rollout (VeloCloud)**:

  - Configured and deployed VeloCloud routers, VLANs, and cutover at multiple sites.
  - Removed legacy Cisco routers and confirmed end-to-end connectivity.
  - Resulted in faster and more resilient branch connectivity, simplified WAN management, and improved visibility and control across the network.
  - Enabled local internet breakout at branch sites, reducing latency for SaaS applications like Microsoft 365 and improving user experience.

- **Cisco UC Server Migration to NextDC**:

  - Led UC server migration and decommissioning efforts.
  - Updated core switch configs for VM VLAN access.

- **FortiGate HA setup:**

  - Configured and implemented HA on FortiGate firewalls to ensure network redundancy, improve reliability, and minimize downtime, enhancing overall network resilience and

and performance.

- o This enabled uninterrupted operation of perimeter security infrastructure in the event of hardware failure, improving overall network resilience and reducing unplanned downtime for critical services.

- **Email Security Integration with Proofpoint:**

  - o Successfully integrated Proofpoint as the primary email security gateway for inbound and outbound email traffic, enhancing the organization's email threat protection posture.
  - o Achieved significant reduction in spam, phishing, and malware emails reaching end users by leveraging Proofpoint's advanced filtering and threat intelligence capabilities.
  - o Implemented seamless routing between Proofpoint and existing email platforms (Google Workspace and Microsoft Exchange), ensuring no disruption to internal email flows.
  - o Facilitated user and admin training for managing Proofpoint policies, resulting in smoother operational adoption and ongoing maintenance.

- **AWS Three-tier Architecture: Deployed a highly available web application using AWS services including:**

  - o Route 53 for DNS.
  - o VPC for network isolation.
  - o Auto Scaling Group for scalability.
  - o RDS for database needs. RDS was just spun up as a necessary part of the infrastructure, no schema was defined.
  - o Detailed design documented on [Medium.](#)

- **AWS Resource Tracker Using Shell Scripting:**

  - o Developed a Bash script to automate resource health checks using AWS CLI.
  - o Scheduled script execution with Cron Job.
  - o Detailed description on [Medium.](#)

- **CI/CD Pipeline for Tech Portfolio Website: Implemented a CI/CD pipeline using:**

  - o AWS Code Pipeline for continuous integration and continuous delivery.
  - o GitHub as code repository.
  - o Automating deployment to S3 with CloudFront for fast and secure content delivery.
  - o DNS managed by Route 53.
  - o SSL certification via ACM.
  - o Project live at [Tech Portfolio.](#)

- **To-do Application: Built a basic to-do application using:**

  - o HTML, CSS and JavaScript for the frontend.
  - o Containerized the application via Docker.
  - o Built the image via Dockerfile using GitHub Actions workflow and deployed it on AWS.
  - o AWS infrastructure created using Terraform.
  - o AWS EventBridge Schedules to run the app server on a schedule – This resulted in

31% cost saving.

- o Detailed description on Medium.
- o App can be accessed over internet on http://tech-stuff.online.

Professional Experience:

System Administrator | VGW (Oct 2023 – Feb 2025)

- Managing Fortinet suite of network equipment, including FortiGate Firewall, Forti Access Points, and Forti Switches.
- Onboarding SaaS applications and integrating Single Sign-On (SSO) with Okta.
- Managing AWS environment, including handling security alerts, spinning up new EC2 instances, and providing support.
- Managing and resolving issues related to Google workspace and Microsoft 365 environments.
- Ensuring automation is in place wherever possible. Automated logs deletion and certificate renewal on OpenVPN server running Ubuntu Linux OS and, automated Access points reboot on Sydney firewall. Both were done using bash script.
- Managing incidents, tasks and changes through Jira.
- Liaising with internal and external stakeholders on projects and communicating technical concepts to non-technical stakeholders, ensuring project alignment, understanding and delivery according to set deadlines.

Network Administrator | Eagers Automotive (Nov 2020 – Oct 2023)

- Deployed Cisco IP telephony infrastructure, Cisco and Aruba network devices as part of network refresh project.
- Managed BAU issues related to IP telephony, Cisco and Aruba infrastructure equipment like firewall, switches, access points and routers across Australia.
- Played a key role in a team of 3 in migrating infrastructure from On-Prem Data center in West Perth to Next DC.

Network Engineer | Datacom (Feb 2020 – Aug 2020)

- Assisted in incident management and troubleshooting Cisco LAN issues, providing a strong foundation in network management.

Voice Engineer | Automotive Holdings Group (Sept 2019 – Nov 2019)

- Configured Call flows and IVRs on Cisco Collaboration platforms, demonstrated attention to detail and technical precision.
- Incident management through ServiceNow.

Orange Business Services (May 2014 - Aug 2019)

- **Incident Management Senior Specialist**

  Oct 2016 - Aug 2019 | Gurgaon, India
  - Central support role for ~100 customers, providing Level 2 technical support for IP telephony and contact center related issues.
  - Specialized in Cisco platforms: CUCM, CUC, UCCX, UCCE, and calling endpoints.
  - Key skills: Cisco Call Manager, Cisco IOS, Cisco Unity, Cisco IPCC, and other Cisco Systems products.

- **Senior Specialist**

  Oct 2015 - Sep 2016 | Gurgaon, India
  - First point of escalation for BHPB project issues.
  - Ensured continuous communication with stakeholders through regular updates, calls, and meetings.

- **Specialist**

  May 2014 - Sep 2015 | Gurgaon, India
  - Supported Cisco LAN/WAN and IP telephony issues for the BHPB project.
  - Managed Level 1 incident resolution while maintaining operational excellence.

Education:

Bachelor of Electronics and Communication – Amity University, India

Certifications:

- AWS Certified Solutions Architect – Associate.
- HashiCorp Certified Terraform Associate.
- Microsoft Certified :Azure administrator Associate
- ITIL.