

# JUNAID IMTIAZ

## Senior Infrastructure & Security Engineer

• Infrastructure Security Active Directory • Cloud Security • Automation • Networking • Enterprise Infrastructure

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## EXPERIENCE

### Senior Systems Engineer

#### Freddie Mac

08/2024 - Present

- Lead enterprise Infrastructure Security and Active Directory modernization initiatives supporting Windows Server 2022 and Windows Server 2025 environments.
- Designed and implemented STIG-aligned security baselines (BSCs) and GPO/LGPO hardening policies for domain controllers and member servers to strengthen enterprise security compliance.
- Automated vulnerability remediation on Windows servers using PowerShell, Python, and Ansible, reducing manual effort and enhancing compliance timelines.
- Spearheaded enterprise initiative to reduce Privileged Account (HPU) usage through CyberArk analysis, JEA/PAM/JIT implementation, and Ansible automation, reducing attack surface and improving Infrastructure Security governance.
- Led migration of thousands of legacy BladeLogic jobs to enterprise Ansible automation frameworks, contributing to significant annual cost savings while eliminating dependency on legacy tooling vendors.
- Expanded enterprise Active Directory into AWS with CloudFormation IaC pipelines. Coordinated Security Groups, ACLs, KMS, CloudWatch, and network configs.
- Coordinated with PKI, Infoblox, F5, AWS networking, and firewall teams to redesign LDAP VIP architecture using Infoblox DTC for intelligent region-aware domain controller affinity routing.
- Built and hardened custom Windows Server 2022 AMI's using Packer, Jenkins, CodePipeline, and LGPO tooling to satisfy Nessus and enterprise security compliance requirements.
- Led Windows Server 2025 certification. Handled security hardening: STIG/BSC validation, vulnerability remediation, app testing, and agent onboarding.
- Utilized Splunk, ESS, Tableau, and Windows event logs to identify legacy ciphers, insecure protocols, and anomalous activity patterns, driving enterprise remediation initiatives.
- Managed patch deployment operations through WSUS and SCCM, including package creation, deployment automation, and Infrastructure Security compliance validation.
- Led enterprise in-place upgrade (IPU) modernization initiatives for Windows Server migrations from 2016/2019 to 2022/2025 using Ansible playbooks and ServiceNow self-service automation portals.
- Worked within Agile/Scrum and DevSecOps environments utilizing Jira, Git, feature branching, pull requests, CI/CD pipelines, and Jenkins-based deployment automation.
- Boosted scripting, automation, efficiency, and productivity using GitHub and Microsoft Copilot.

## SUMMARY

Senior Infrastructure and Security Engineer with 8+ years of experience designing, securing, automating, and modernizing enterprise-scale Windows, Active Directory, cloud, and network infrastructure environments. Proven expertise in Infrastructure Security, vulnerability remediation, cloud infrastructure, enterprise automation, SIEM analysis, and platform modernization using PowerShell, Python, Ansible, AWS, SCCM, Jenkins, and Infrastructure-as-Code (IaC) methodologies.

Strong background leading enterprise initiatives involving privileged access management (PAM/JIT/JEA), Windows Server hardening, STIG compliance, Infrastructure Security, Active Directory modernization, hybrid cloud architecture, and DevSecOps-driven automation initiatives that improved operational efficiency, reduced attack surface, and strengthened enterprise compliance.

Extensive experience troubleshooting and supporting large-scale routing, switching, and data center networking environments including BGP, OSPF, VXLAN, EVPN, MPLS, Cisco NX-OS, IOS-XR, and Clos-based architectures

## EDUCATION

### Master's Information Systems Security

#### University of the Cumberland

03/2020 - 12/2021 Williamsburg, United States

### Master of Engineering - Electrical Engineering (Telecommunications)

#### City College of New York (CCNY)

08/2015 - 06/2017 New York, United States

### Bachelor of Science - Engineering Sciences

#### GIK Institute

08/2010 - 06/2014

## CERTIFICATIONS

### Cisco Certified Network Associate (CCNA)

Cisco

## SKILLS

### Security & Compliance

Active Directory Security

STIG Compliance

Vulnerability Remediation

Nessus

Splunk

ESS

SIEM Analysis

CyberArk

PAM / JIT / JEA

PKI & Certificate Management

Kerberos

LDAP

MFA

Windows Hardening

Zero Trust

Security Baselines

SCCM

WSUS

## EXPERIENCE

### Lead Systems & Vulnerability Remediation Engineer

#### HP

10/2021 - 08/2024

- Led vulnerability remediation and AD security across global infrastructure.
- Built PowerShell and Python frameworks to enhance vulnerability analysis, patch deployment, reporting, compliance validation, and remediation activities.
- Managed remediation strategies across thousands of Windows systems while maintaining production stability and enterprise Infrastructure Security standards.
- Automated vulnerability reporting, tracked remediation, measured compliance, and enhanced security dashboards with cybersecurity/infrastructure teams.
- Managed enterprise patch deployment operations using SCCM, Group Policy, scripting, and automation frameworks across distributed global environments.
- Conducted advanced troubleshooting involving firewall configurations, routing behavior, packet captures, and network traffic analysis using Wireshark and tcpdump.
- Coordinated migration and remediation initiatives for End-of-Life operating systems and applications to improve compliance posture and reduce enterprise security risk.
- Supported Infrastructure Security initiatives involving Active Directory hardening, vulnerability remediation, enterprise patching, and compliance validation.
- Led enterprise training in cybersecurity, automation, Infrastructure Security, and modernization.

### Network Engineer

#### Cisco

06/2019 - 09/2021

- Provided advanced troubleshooting and root cause analysis for enterprise and service provider customers involving networking protocols like BGP, OSPF, MPLS, and technologies like VLAN, EVPN in large-scale data center environments.
- Supported diverse Cisco data center architectures including Spine-Leaf and Clos-based networks utilizing NX-OS, IOS-XR, IOS-XE, and cloud networking technologies.
- Performed network troubleshooting and optimization involving routing, switching, multicast, and packet forwarding across enterprise and cloud-hosted environments.
- Collaborated with development and engineering teams by filing detailed bug reports and analysis for software and hardware defects, ensuring intricate problem resolution.
- Developed automation workflows using Python, NETCONF, RESTCONF, and YANG models to streamline network deployments, improving operational efficiency.
- Managed VXLAN EVPN networks with overlay/underlay architectures and ECMP forwarding, enhancing routing system performance.
- Utilized advanced tools like Wireshark, GDB debuggers, and Python scripting to perform deep analysis of network anomalies, hardware/software crashes to ensure network reliability.

### Network & Systems Administrator

#### The Bridge Corporation

10/2018 - 05/2019

- Revamped network infrastructure. Enhanced hardware to boost redundancy, resilience, and reliability.
- Implemented Cisco AnyConnect VPN solutions with ASA firewalls, AWS VPN Gateway, NAT, ACLS, and remote access configurations
- Managed Windows and Linux server environments including Active Directory, WSUS, backup infrastructure, VMware ESXi hosts, and Infrastructure Security operations
- Implemented enterprise monitoring solutions using SolarWinds and PRTG for infrastructure visibility, alerting, and proactive operational monitoring

## SKILLS

### Cloud & DevSecOps

AWS (EC2, S3, VPC, IAM, CloudWatch, Security Groups, ACLs, KMS)

CloudFormation Infrastructure as Code (IaC)

Jenkins Git GitHub Bitbucket

CI/CD Pipelines Packer DevSecOps

### Automation & Scripting

PowerShell Python Ansible REST APIs

Power Automate PowerApps

SharePoint Automation VMware Aria APIs

### Systems Engineering

Active Directory Group Policy (GPO) DNS

Windows Server 2016/2019/2022/2025 SCCM SCOM

VMware ESXi WSUS

Windows Server In-Place Upgrades

### Networking & Data Center Technologies

BGP OSPF VXLAN EVPN MPLS

Spine-Leaf Architecture Clos Architecture

Cisco NX-OS IOS-XR IOS-XE Routing & Switching

F5 GTM/LTM Infoblox DTC Wireshark TCP/IP

NETCONF RESTCONF YANG ECMP

### Tools & Platforms

Jira ServiceNow Tableau SolarWinds PRTG

LogicMonitor VMware Aria