

MUHAMMAD RIZA HILMI

IT Infrastructure & Security Lead

Network Architecture | Cyber Security | Digital Forensic | Cloud Infrastructure



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PROFESSIONAL SUMMARY

IT Infrastructure & Security Lead with over 15 years of extensive experience in networking, cybersecurity, and information technology infrastructure management. Proven track record in executing large-scale projects for institutional and governmental sectors, developing robust security policies, and managing complex network, server, and cloud environments. Possesses a strong academic and consultative background with a strategic focus on system security, scalability, and long-term sustainability.

PROFESSIONAL EXPERIENCE

Network Infrastructure & Security Lead March 2023 – Present
(leading enterprise network systems)

ITB STIKOM Bali – Bali, Indonesia

- **Strategic Infrastructure Oversight:** Lead the planning and management of network, server, and cloud infrastructure to ensure high availability, security, and service scalability.
- **Enterprise Architecture Management:** Manage enterprise-scale network architecture (LAN, MAN, WLAN, VPN, Firewall), physical and virtual servers, and complex cloud environments.
- **Policy & Standard Development:** Formulate and implement comprehensive information security policies, Standard Operating Procedures (SOPs), and technical standards for system and network infrastructure.
- **Operations & Incident Response:** Oversee daily operations, proactive system monitoring, and the mitigation of security incidents and risks.
- **Security Integration:** Lead the development and integration of multi-layered security systems, including the implementation of Cloudflare as a Proxy and Web Application Firewall (WAF).
- **Leadership & Talent Development:** Manage the network and systems technical teams, including mentorship, performance evaluations, and knowledge transfer initiatives.
- **Budgetary & Procurement Control:** Develop and control budgets for network and server infrastructure, while managing the procurement process for technology hardware and services.

Network Engineering Expert
Dinas Komunikasi, Informatika dan Statistik
(Communication, Informatics, and Statistics Office) –
Denpasar, Bali, Indonesia

**October 2024 –
February 2025**

- **Architecture Design & Analysis:** Designed and analyzed comprehensive network architectures (LAN, MAN, WLAN, VPN) tailored to the specific operational requirements of the Denpasar City Government.
- **Strategic Technical Consulting:** Provided expert consultations and recommendations for secure, reliable, and scalable network solutions across short-term, medium-term, and long-term planning horizons.
- **Security Implementation:** Implemented and optimized network security protocols, including firewalls, VPNs, network segmentation, and advanced access control systems.

- **Advanced Troubleshooting:** Resolved complex high-level network and connectivity issues through systematic technical analysis and remediation.
- **System Integration Optimization:** Delivered strategic recommendations for the seamless integration of network systems with server environments, cloud platforms, and application services.
- **Performance Auditing:** Conducted regular network audits and performance evaluations to ensure continuous infrastructure optimization.
- **Technical Documentation:** Developed comprehensive technical documentation, including intricate network diagrams and standardized configuration protocols.
- **Technical Mentorship:** Provided specialized technical assistance and facilitated knowledge transfer initiatives for the internal IT team.

Senior Network Engineer

ITB STIKOM Bali – Bali, Indonesia

February 2012 – March 2023

- **Architecture Design:** Engineered and developed robust network architectures (LAN, MAN, WLAN, VPN) tailored to organizational growth and requirements.
- **Performance Optimization:** Managed and optimized network performance, ensuring high availability and system reliability across the institution.
- **Security Protocol Deployment:** Implemented and configured comprehensive network security measures, including advanced firewalls, VPNs, network segmentation, and access control.
- **Advanced Root Cause Analysis:** Led high-level network troubleshooting and performed in-depth root cause analysis to mitigate recurring technical issues.
- **Cross-Platform Integration:** Orchestrated the integration of network infrastructure with servers, application systems, and cloud environments.
- **Capacity Planning:** Conducted continuous monitoring and evaluation to manage and enhance network capacity in line with increasing demand.
- **Standardization & Documentation:** Authored detailed technical documentation, network diagrams, and standardized configuration protocols.
- **Mentorship:** Provided technical guidance and professional mentorship to junior engineers to foster team competency.

Junior Network Engineer

UPN "Veteran" Yogyakarta – Yogyakarta, Indonesia

June 2007 – January 2012

- **Hardware Maintenance:** Assisted in the installation, configuration, and maintenance of core network devices, including routers, switches, and access points.
- **Connectivity Monitoring:** Performed daily network monitoring and connectivity health checks to ensure consistent uptime.
- **Technical Support:** Resolved baseline troubleshooting issues related to network infrastructure and end-user connectivity.
- **Standardized Implementation:** Supported the implementation of network configurations in accordance with established standards and senior engineer directives.
- **Infrastructure Support:** Assisted in the day-to-day management of LAN, WLAN, and enterprise internet connectivity.
- **Documentation Support:** Developed and updated network topology diagrams and configuration records.
- **Cross-Functional Coordination:** Collaborated with application teams and external vendors to resolve technical discrepancies.

- **Professional Development:** Actively engaged in technical training and competency development programs within the networking domain.

EDUCATION

Udayana University

2012-2018

Master of Science in Management of Information Systems and Computers

Focus on Machine Learning and Intelligent Systems.

Thesis: "Performance Analysis of Server Backup and Virtualization Systems in Datacenters Based on Neural Networks."

UPN "Veteran" Yogyakarta

2005-2011

Bachelor of Engineering in Informatics Engineering

Focus on Integrated Networks and Application Servers utilizing Single Sign-On (SSO).

Thesis: "Application Integration via Single Sign-On (SSO) Methods Utilizing Central Authentication Service (CAS) and Lightweight Directory Access Protocol (LDAP)."

CORE COMPETENCIES

- IT Governance & Infrastructure Strategy
- Network & Cybersecurity Management
- Digital Forensic
- Cloud & Virtualization (VPC, Hybrid Environments)
- Technical Leadership & Mentoring
- Risk Assessment & Incident Response

PROFESSIONAL CERTIFICATIONS

- MikroTik Certified Network Associate (MTCNA)
- Certified Cyber Security Analyst (CCSA)
- Certified Data Scientist (CDS)
- Foresec Certified in Computer Hacking (FCCH)
- Foresec Certified in Network Security (FCNS)
- Foresec Certified in Computer Forensic (FCCF)