Ash Kavousi

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Core Competencies

IT/OT Systems Engineer with extensive experience across MSP, enterprise, industrial, and mining environments. Skilled in designing, implementing, and supporting IT infrastructure with strong hands-on knowledge of networking, cybersecurity, and system administration.

- IT & OT Infrastructure Design and Integration Extensive experience designing enterprise IT infrastructure and bridging systems with OT environments.
- **Cybersecurity** Implementing secure configurations, access controls, and system hardening to protect infrastructure and data, with experience in risk assessment, compliance, and audits.
- Cloud and Hybrid Solutions (Azure, VMware) Deploying and managing virtualized and cloud-based environments that improve scalability and resilience.
- Systems/Network Administration and Automation Maintaining reliable systems and networks with a focus on efficiency and automation.
- **Technical Project Delivery** Leading technical implementation across full project lifecycles, from design and SoW preparation to deployment and handover.
- Leadership and Collaboration Provides strategic input on technology roadmaps and digital transformation initiatives, aligning technical direction with operational and organizational goals. Coordinates cross-functional teams, mentors junior engineers, and fosters strong stakeholder and vendor relationships.

Work Experiences

Newmont Corporation

- ♦ ICS/OT Network & Cybersecurity Advisor | Jan 2023 Present
- ♦ Infrastructure Engineer | Sep 2022 Dec 2022

Supported Newmont's Cadia mine — one of Australia's largest and most technologically advanced gold-copper operations — by maintaining critical IT and OT infrastructure in a 24/7 production environment. Managed and optimized hybrid (on-prem and cloud) infrastructure and a large-scale surface and underground industrial network.

Transitioned to the Regional Process Control Team to support broader OT operations, drive infrastructure improvements, and lead cybersecurity initiatives across multiple sites. Collaborated with cross-functional IT, OT, and cybersecurity teams to standardize infrastructure practices, enhance security posture, and implement modern, resilient solutions across the regional network.

Selected Projects

Involved in multiple projects either as a technical lead or as a contributor to design, deployment, evaluation, Statements of Work (SoW), proof of concept (PoC), coordination, or site support. Key projects include:

- Calroty OT Cybersecurity Deployment Site Technical Lead
- Security Zoning Deployment (Network Segmentation)
- IT/OT Network Separation
- DCS Virtualization Technical Lead
- Azure Stack HCL Deployment OTIS v2 (Operational Technology Infrastructure Services)

- ITAM/IPAM Solution Deployment for Process Control Team (NetBox) Technical Lead
- Eaton Modular UPS Deployment for Micro Datacentre Technical Lead
- SolarWinds Integration Across Sites
- Upgraded DCS HIS and EWS from Win Server 2008 R2 to Win Server 2022 Technical Lead
- RDS High-Availability Deployment for Site Asset Operating Centre (SAOC) Technical Lead
- FactoryTalk Asset Centre (FTAC) and UGS Upgrade Technical Support
- SmartCyclone (intelligent hydro cyclone monitoring and optimization) Technical Support
- Industrial Firewall Proof of Concept (PoC) Site Technical Lead

Technologies & Practices

Technologies listed indicate tools and platforms I have worked with; proficiency may vary by technology.

Microsoft Technologies (Wintel, SCCM, Azure, MDM, Entra ID, WSUS, MDT); VMware (ESXi, vCenter, vSphere); Cisco (Catalyst, Meraki, Nexus, UCS chassis, Wireless Controller, ISE); PwerShell, Power CLI, Industrial switches (Hirschmann, Moxa, Cisco, RuggedCom); Yokogawa DCS/FCS, Citect SCADA, and FactoryTalk networks; PLC (Rockwell/Allen-Bradley and Siemens); SCADA, OT/ICS protocols: Modbus, Profibus, OPC; Eaton modular UPS; SolarWinds, NetBrain, Netbox (ITAM/IPAM) and Lansweeper. ITIL, ISO/IEC 27001, NIST (CSF), IEC 62443 and Purdue Model.

Key Achievements:

- Configured and integrated Eaton modular UPS into centralized monitoring and alerting system.
- Implemented and customized NetBox for centralized ITAM/IPAM for Process Control.
- Designed and deployed virtualized testing environment on VMware ESXi for OT application validation.
- Contributed to OT/IT network segmentation project, auditing VLANs/VRFs and supporting switch replacement planning.
- Assisted in migration from Forescout to Claroty platform for OT cybersecurity.
- Supported implementation of OT network zoning and micro segmentation to enhance security and reduce operational risk.
- Conducted Active Directory audit for Process Control domain, improving security posture.
- Designed and deployed remote access infrastructure for SAOC operators with HA RDS and session broker across non-federated AD domains.

The Missing Link (TML)

Senior System Engineer | Jul 2020 – Aug 2022

The Missing Link is a leading MSP specialising in modern workplace and cybersecurity solutions for mid-to-large enterprises. As part of the Solutions Team, I worked closely with Sales to assess client environments and translate business requirements into tailored technical solutions. We thoroughly analysed each client's current needs and future growth plans, often presenting multiple options to ensure scalability and long-term value. Each engagement followed a full project lifecycle—from scope definition and solution design to implementation within budget and timeframe—followed by POCs, training, and handover to the client's IT or support team.

Core Service Provided:

- Migration of on-premises and hybrid infrastructure to Microsoft Azure
- Access and identity management solutions, including Conditional Access, MFA, SSO, RBA, geoblocking, and patch management strategies.
- Managing teleworkers, remote access, secure file sharing, and SaaS/PaaS connectivity
- Disaster Recovery Planning (DRP) and cloud-based backup.
- Configuration and maintenance of Copilot services for clients
- Intune MDM policy and security configuration deployment for remote devices.

• Migration of legacy voice systems to Microsoft Teams Voice

Technologies & Practices

Technologies listed indicate tools and platforms I have worked with; proficiency may vary by technology.

Microsoft Technologies (Azure, Intune/MDM, Entra ID, MS Defender, EOP); VMware (ESXi, vCenter, vSphere); Hyperconverged chasses, Hosting Service, Private Cloud, VPS, Cloudflare, Proofpoint, Automox, Mimecast, Veeam, N-Central, ISO/IEC 27001, NIST (CSF) and ACSC Essential Eight (E8).

Cybersecurity Service Provided:

The Missing Link provides comprehensive cybersecurity services, and our team frequently partners with the Cybersecurity Division to strengthen client environments through the following initiatives:

- Conducted cybersecurity risk assessments, provided remediation guidance, and implemented compliance-aligned policies to safeguard critical systems and data
- Managing security awareness campaigns and user education programs
- Addressing vulnerabilities identified in the ACSC Essential Eight (E8) Maturity Model, Cyber Hygiene Improvement Programs (CHIPs), NIST (CSF) and ISO27001.
- Implementing email and DNS security measures
- Maintaining and optimising cloud asset security, including data protection and encryption for cloud services.

Selected Projects

• Sydney Airport Cybersecurity Enhancement Program

Contributed to a year-long cybersecurity remediation initiative at Sydney Airport following a Microsoft-led infrastructure assessment. Collaborated with internal IT teams and external consultants to implement security controls, address identified vulnerabilities and support informed risk management decisions.

• Private Cloud Migration Project (Technical Lead)

Served as technical lead in upgrading TML's private cloud platform for clients with strict data residency requirements. Implemented a new Dell hyper-converged infrastructure based on VMware technology and oversaw the live migration of 300+ virtual machines, storage volumes, and digital assets from the legacy environment to the new platform with minimal disruption.

5G Networks

System and Network Engineer | Jan 2018 – Jun 2020

5G Networks is a telecommunications carrier and leading Managed Service Provider (MSP). I joined the Level 3 team following the acquisition of Anittel's communications division to support enterprise clients across network, data centre, and cloud services.

Core Service Provided:

- Supported and maintained mission-critical network and communication systems across onpremises, cloud, and hybrid environments.
- Managed and secured remote and site connectivity, including VPN, MPLS, SSL VPN, IPsec, and identity-based network access controls.
- Designed, deployed, and maintained cloud connectivity to SaaS and PaaS services on the Microsoft Azure platform.
- Implemented and maintained identity and access management solutions, including MFA, SSO, role-based access (RBA), and conditional access policies.
- Provided Level 3 network escalation and troubleshooting across LAN, WAN, and edge infrastructure, ensuring high availability and minimal downtime.

- Monitored, analysed, and optimised network performance, routing, and security policies to meet SLA and compliance requirements.
- Collaborated with service providers, vendors, and contractors to deliver network projects on time and within scope.
- Supported project planning and implementation from design through deployment and postdelivery support.

Technologies & Practices

Technologies listed indicate tools and platforms I have worked with; proficiency may vary by technology.

Cisco Networking (IOS, Catalyst, ASA, Meraki); Fortinet (FortiGate); Palo Alto (GlobalProtect); DrayTek, Microsoft Azure (VPN Gateway, ExpressRoute, Virtual Network, AD Connect); VMware (ESXi, vCenter); Windows Server (AD DS, DNS, DHCP, Group Policy, Hyper-V); Sophos UTM; SonicWall; IPsec, SSL VPN, BGP, OSPF, VLANs, QoS; SolarWinds, Auvik; Network Security (MFA, SSO, RADIUS, Conditional Access).

Anittel

Senior Support Engineer | Feb 2014 - Dec 2017

Anittel, a Managed Service Provider (MSP), supported regional enterprise clients across NSW Central West by delivering end-to-end IT support and infrastructure services across network, systems, and cloud environments.

- Provided Level 3 technical support across network, server, and application environments, resolving complex infrastructure and connectivity issues.
- Performed proactive maintenance, patching, and system health checks to ensure uptime and business continuity.
- Configured, tested, and troubleshot hardware, software, and network components to meet performance and reliability targets.
- Implemented and managed critical business systems, including backup, disaster recovery, and secure remote access solutions.
- Monitored and maintained LAN/WAN services across regional sites, ensuring secure and stable connectivity.

Selected Projects:

- Microsoft 365 Email Migration Projects (Technical Lead)
 Successfully delivered multiple successful migrations from on-premises Microsoft Exchange to Microsoft 365 (O365), improving collaboration, reliability, and operational efficiency for enterprise clients.
- Infrastructure Upgrade Projects Food & Agribusiness
 Delivered infrastructure upgrades for clients in dairy, agribusiness, and food manufacturing, integrating IT infrastructure with industrial systems such as PLCs, SCADA, and MES.
 Responsibilities included analysing business requirements, designing solutions, preparing SOWs, scheduling, managing procurement and deployment within budget and timeframe, coordinating handover, and providing staff training.

Technologies & Practices

Technologies listed indicate tools and platforms I have worked with; proficiency may vary by technology.

Cisco IOS (Catalyst switches, ASA firewalls), HP Pavilion series, Dell PowerEdge Series, VPN (IPsec, SSL), MPLS, VLANs, QoS, RADIUS, HSRP, network access control. Microsoft 365, Windows Server, AD, SCCM, WSUS, DHCP, DNS, GPO, VMware (ESXi, vCenter), Windows Server (AD DS, DNS, DHCP, Group Policy). Veeam backup, ShadowProtect backup, DRP. Industrial Integration: SCADA, PLC, MES connectivity considerations for infrastructure projects. ITIL-aligned service delivery, basic awareness of ISO/IEC 27001 and NIST (CSF).

IT Consultant (Contract)

- ♦ Agile Insights Cloud & Infrastructure | Jul 2013 Jan 2014
 - Designed and deployed Microsoft Azure environments to host mission-critical business applications and SQL databases. Delivered secure, scalable cloud architectures tailored to performance and compliance requirements. Supported infrastructure planning, deployment, and optimisation for smooth transitions from on-premises systems to cloud platforms.
- ♦ Attaché Software Infrastructure Relocation & Migration | Apr 2013 Jun 2013Led the relocation and migration of IT infrastructure from Attaché Software's North Sydney office to a new facility in Macquarie Park. Planned and executed transfer of physical servers, 100+ virtual machines, backup systems, and network services, ensuring uninterrupted operations. Designed and optimised the new data centre layout, maintained technical documentation, and collaborated with internal teams and vendors to ensure timely delivery and risk mitigation.

United Nations (UN)

ICT Project Officer | Apr 2004 – Dec 2012

Collaborated with UN agencies, including UNDP, UNHCR, and UNESCO, supporting IT operations across metropolitan, remote, and post-conflict regions. Progressed from System Administrator to Senior System Administrator and finally ICT Project Officer, managing IT infrastructure, connectivity, and digital services for field offices, mobile units, and mission-critical projects.

Key Achievements / Responsibilities:

- Administered IT systems and secure networks for two UNHCR sub-offices and the UNESCO Tehran Cluster Office, ensuring reliable connectivity for seven mobile units in remote regions.
- Deployed micro data centres at three Middle Eastern universities and implemented digital infrastructure for national libraries in Iran and Tajikistan.
- Provided IT and logistical support for refugee operations, including voluntary repatriation of Afghan refugees, preparation for Iraqi refugee influx, and medical services across three camps on the Iran-Afghanistan border.
- Facilitated large-scale, technology-supported election processes for Afghan refugees in Iran and Iraqi refugees in Syria.
- Liaised with local authorities, NGOs, and service providers to coordinate complex technological and operational initiatives at international and governmental levels.

NARGAN Consulting Engineers

IT & CAD Support Technician | Sep 2002 – Mar 2004

Nargan is a leading consulting engineering firm specialising in oil and gas infrastructure design. Joined as a junior support technician within the drafting and computer department, providing technical assistance and later supporting the transition of design operations to digital drafting systems.

- Provided day-to-day technical support for internal computer systems, networks, and CAD workstations.
- Assisted the design team in migrating from manual to digital design workflows using AutoCAD and related tools.
- Supported software installation, configuration, and troubleshooting for design and engineering applications.

• Collaborated with engineering and drafting teams to improve design efficiency and digital file management practices.

Leadership & Team Management

- United Nations Deputy of the VRC Mobile Unit, leading 4–7 staff.
- Electoral mission in Syria, managed a team of 10–12 staff and supervised 50–100 contractors supporting polling stations in remote areas.
- Nominated by the Mission Director to lead the commissioning and closure of sub-offices across Syria, managing a team of 15 officers and technicians.
- The Missing Link Served as Project Technical Lead for five key clients, guiding two junior technicians and maintaining relationships with internal and external stakeholders.
- 5G Networks Responsible for the NSW Central West sub-office, leading a team of 3–4 engineers based in Orange and Bathurst (2016–2017).
- Attaché Software Coordinated a project team of around 10 contractors, liaising between development and operations teams and providing regular updates to stakeholders.

Personal Projects

Built and maintained a VMware/Proxmox home lab simulating enterprise networks and services.

- Installed, configured, and administered Linux servers (Ubuntu, CentOS, Kali Linux), Nginx (reverse proxy), PfSense, EVE-NG (network simulator), databases, and file services.
- Explored penetration testing and security assessments using Kali Linux and configured VPN servers for secure remote access.
- Experimented with networking, security, automation, IoT integration, using tools such as Ansible, Docker, firewall configurations.
- Tested cloud integration scenarios using Azure and AWS free tiers, including hybrid environment setups.

Education & Professional Certificates

BS (Bachelor of Science)

Science and Technology - IAU University - 2003

CCNP – Security

SCOR certificate successfully obtained in August 2023, and complementary exam scheduled for early-2026

CISSP – Certified Information System Security Professional (ISC2)

Under progress and planned for late 2025

ISO/IEC 27001 – Information Security Management System (ISMS)

2022 – Lead Implementer and Auditor

CCNA – Routing and Switching

Certificate renews in August 2023

Sophos Certified Engineer

2019 – Sophos Certified Engineer

Dell EMC Campus Network

2018 - Credential and Maintenance

MCSE - Infrastructure

2013 - Microsoft Certified Solutions Expert

MCSA - Windows Server

2012 - Microsoft Certified Solutions Associate

Certified in Fiber Optic Technology

AQF - JB Hunter - 2025