

# SAM LUDWIG

## Infrastructure & M365 Engineer

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### PROFESSIONAL SUMMARY

Infrastructure and M365 Engineer with 6+ years managing enterprise-scale environments supporting 660,000+ users across 1,500+ sites. Trusted by Victoria Police, Transurban, and the Department of Education to deliver automation-driven outcomes in hybrid cloud, identity, and endpoint management. Specialist in Microsoft 365 (Exchange, Intune, SharePoint, Teams, Entra ID), PowerShell engineering, and L3 escalation resolution. Track record of reducing incident volume 15%, accelerating ticket resolution 40%, and migrating 100+ clinical endpoints with zero downtime.

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### TECHNICAL EXPERTISE

**M365 & Cloud:** SharePoint Online, Exchange Hybrid, Teams, OneDrive, Entra ID, Azure Functions, Power Automate, Microsoft Copilot, Defender for Endpoint, Purview DLP

**Identity & Security:** Conditional Access, MFA enforcement, hybrid AD/Entra ID sync, ACSC Essential 8 compliance, Zero Trust architecture, DLP policies, compliance scripting

**Endpoint Management:** Intune (MDM/MAM), Windows Autopilot, SCCM/MECM, Windows 10/11 enterprise, SOE design, device lifecycle, group policy

**Automation & Scripting:** PowerShell (advanced/PnP), Python, JavaScript/TypeScript, React, SPFx web parts, Azure DevOps CI/CD, Git version control

**Infrastructure:** VMware, Hyper-V, Windows Server (2016/2019/2022), Active Directory, DNS/DHCP, VPN, VLAN, Layer 1 troubleshooting, hardware provisioning

**Service Management:** ITIL 4, ServiceNow, Zendesk, incident/problem management, SLA governance, RCA documentation, knowledge base authoring

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### PROFESSIONAL EXPERIENCE

#### Senior Managed Services Engineer

*CapGemini - Department of Education Victoria | Dec 2021 - Present*

- Own the largest SharePoint farm in the Southern Hemisphere: 660,000+ users, 1,500+ sites, 99.9% uptime maintained across a 4-year engagement
- Ultimate Tier-3 escalation point for M365, SharePoint Online, and Google Workspace; delivered 15% reduction in repeat incidents by engineering root-cause knowledge base articles adopted across 200+ support staff
- Engineered PnP PowerShell automation auditing and enforcing MFA compliance across 200+ SharePoint sites, eliminating manual compliance checks and producing automated ACSC Essential 8 reporting
- Administered Exchange Hybrid and Teams federation for 20,000+ staff, resolving complex mail-flow, calendar-sharing, and cross-organisation collaboration issues within SLA
- Resolved AD/Entra ID/Google Workspace sync conflicts across hybrid identity infrastructure, maintaining seamless SSO for all users
- Spearheaded Azure cloud adoption and legacy application remediation, reducing on-premise server dependency by 30% and freeing 120+ hours/month in maintenance effort
- Designed and deployed ServiceNow integration layer ingesting M365 presence data and algorithmic workload engine, eliminating manual triage and reducing ticket assignment time by 40%
- Authored structured RCA reports and searchable knowledge base, cutting average resolution time by 25% and reducing new-hire onboarding from 3 weeks to 10 days

#### L2/L3 Technical Support Engineer

*Australia Post - CapGemini | 2023 - 2024*

- Delivered L1/L2 support at MyITHub service desk: device repair, OS reimaging, provisioning, and loan device management across a national fleet of 15,000+ endpoints
- Engineered keystroke-injection automation (AutoHotkey) to fully automate ITSM ticket workflows in ServiceNow, eliminating 15+ hours/week of manual data entry across the team

- Managed full endpoint lifecycle including OS migrations, Autopilot/UEM enrolment, and compliant hardware disposal under NIST 800-88 guidelines
- Deployed a self-service kiosk portal for knowledge base access, password resets, and ticket logging, reducing service desk call volume by 20%

### **Endpoint Migration Engineer**

*St John of God Health Care | 2023*

- Led Windows 11 enterprise migration across 100+ clinical endpoints with 100% Windows Autopilot adherence in a live hospital environment - zero downtime, zero patient care disruption
- Managed full migration lifecycle: hardware imaging, Autopilot enrolment, Intune policy deployment, EMR compatibility validation, and post-cutover hypercare
- Served as primary liaison between clinical staff and engineering, resolving EMR and diagnostic tool compatibility issues in real time under hospital change-control protocols
- Delivered hands-on hypercare support to 100+ medical staff post-cutover, achieving 98% user satisfaction in post-migration surveys

### **Application Support Engineer**

*Knosys | Dec 2020 - Dec 2021*

- Delivered expert L3 support for GreenOrbit intranet platform across Cotton On, Harvey Norman, and Healthscope, maintaining 95% SLA resolution rate
- Developed PowerShell automation reducing client migration processing by 87% (2 hours to 15 minutes), saving 10+ hours/month per migration cycle
- Built Python/PowerShell patching scripts reducing manual effort by 20% and improving patch-cycle consistency across 500+ endpoints
- Authored RCA documentation adopted as the reference standard for all subsequent migration cycles, reducing post-migration defect recurrence by 40%

### **SharePoint Developer**

*Engage Squared | Mar 2018 - Dec 2020*

- Delivered 5+ enterprise SharePoint intranets for Victoria Police, Transurban, and Cimic Group using SPFx, React, and TypeScript
- Implemented CI/CD pipelines via Azure DevOps, reducing deployment cycles by 25% while maintaining ISO 27001 governance controls
- Led client discovery workshops driving a 20% increase in M365 platform adoption across three enterprise organisations
- Executed end-to-end migration of legacy on-premise SharePoint environments to SharePoint Online with zero data loss

### **Telecommunications Technician**

*NBN | Oct 2016 - Nov 2017*

- Performed Layer 1 infrastructure deployments, physical cabling, and fault-finding across residential and commercial environments in Melbourne's eastern suburbs

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## **EDUCATION & CERTIFICATIONS**

**Microsoft Certified: Azure Administrator Associate (AZ-104)**

**Microsoft Certified: Azure Fundamentals (AZ-900)**

**ITIL 4 Foundation**

**Coder Academy** - Web Development Fast Track Bootcamp | 2018

**Diploma of Information Technology**

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## **KEY PROJECTS & PORTFOLIO**

**ServiceNow UI Engine** - Client-side browser extension integrating M365 presence data with ServiceNow ticket queues, eliminating manual status lookups for L1/L2 staff across the service desk

→ [github.com/Ludwixix/YellowSnow](https://github.com/Ludwixix/YellowSnow)

**M365 Diagnostic GUI** - Python-built tool enabling L1 staff to execute PowerShell diagnostics against Exchange and Teams without command-line access, reducing L2/L3 escalation volume by an estimated 30%

→ [github.com/Ludwixix/pyspo-tool](https://github.com/Ludwixix/pyspo-tool)

**JobGoblin** - Browser automation engine scraping job boards with custom Boolean parameters, filtering logic, and deduplication

→ [github.com/Ludwixix/JobGoblin](https://github.com/Ludwixix/JobGoblin)

**MFA Compliance Automation Framework** - PnP PowerShell framework auditing 200+ SharePoint sites with automated compliance reporting, ACSC Essential 8 alignment, and self-remediating workflows

**Windows 11 Clinical Migration Program** - End-to-end enterprise deployment of 100+ endpoints at St John of God Health Care with 100% Autopilot adherence and zero patient care disruption