AeRO

CAUDITCloud

macquarie CLOUD SERVICES | POWERED BY DELL Technologies

Safeguarding data, Accelerating discovery.

Secure, scalable infrastructure for research innovation.

macquarie CLOUD SERVICES

Who We Are - Macquarie Cloud Services

Australia's Most Recommended Cloud Provider.

Security

Built-in, not bolted on. Sector-grade protection.

Accreditation Focus

The standards you expect, the trust you need.

Expert MSP

Local experts, global credentials. Always on, always responsive.

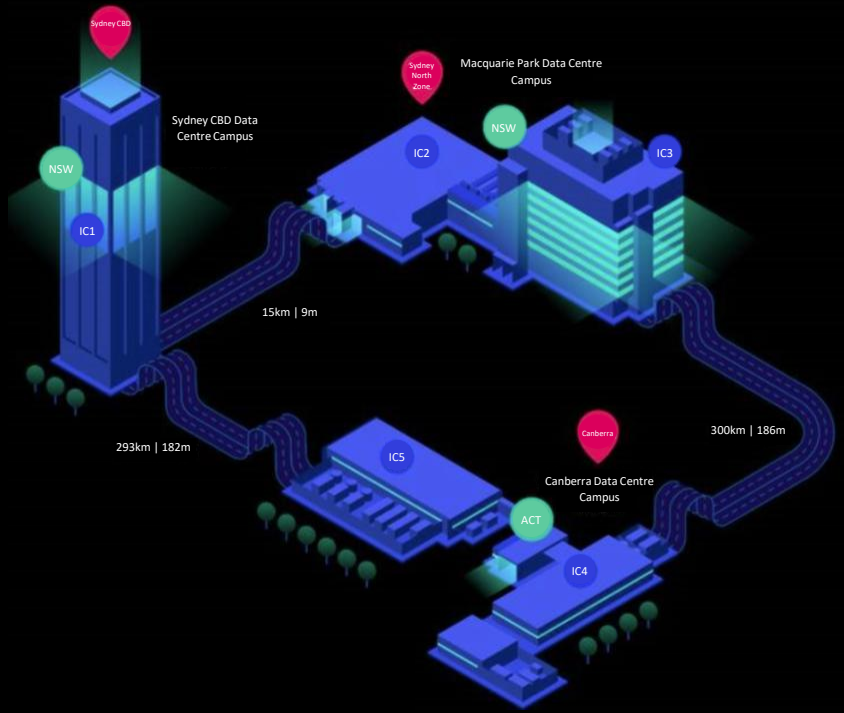
Hybrd Cloud

Wherever you are on your cloud journey — we meet you there.

Backed by sector-grade trust, certified to meet the highest standards in government and research.

- SSAE SOC 2 Type I and II
- N+1 power and cooling design
- SOC1 Type 2 Certification
- ISO 27001 Information Security Management
- SCEC Zone 2 and higher
- PCI-DSS 3.2.1
- Federal Government Certified Strategid Hosting Provider
- ISO 14001 Environmental Management System
- DISP Certified - Defence Industry Security Program
- ISO 45001 OH&S Management System
- 200+ engineers security cleared to government standards
- ISO 9001 Quality Management System

Secure, Sovereign, and Compliant Datacentres



Home of the Australian Federal Government.

Home of Global Hyper-Scalers.

International Cloud Providers.
Large enterprise.
Financial Institutions.
International IaaS, PaaS & SaaS.
ASX Top 200.
Critical Infrastructure.

CAUDITCloud

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A composable set of managed infrastructure services focused on real world research requirements.

Microsoft Partner | Azure Expert MSP

DELL Technologies TITANIUM PARTNER

Product Overview

CAUDITCloud

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Composable. Flexible. Sector-First.
Purpose-built for education and research infrastructure.

Macquarie Flex

Cost Control | Cloud Native | Workload Placement

Granular control across environments with sector-optimised cost efficiency, native cloud orchestration, and dynamic workload placement.

Research Cloud

HPC | AI | Storage | IC3 | GPUaaS

Accelerate research with high-performance compute, AI/ML environments, and scalable storage. Built from the ground up for education and science.

Private Cloud & Azure

Compliance | Azure Arc | Sovereign

Secure, sovereign private cloud with Azure-native integration. Full visibility and control via Azure Arc. Ideal for next-gen compliance.

Major considerations.

Drive accelerated innovation in the face of rising costs and risks.

Protect sensitive data.

Deliver results within the bounds of rigorous compliance (Essential 8 ML2, IRAP).

Accelerate insights in the face of rising threats.

Falling short means missed grants, delayed outcomes and diminished trust.

Compliance and Security.

Mandatory Compliance.

- Defence grants require Essential 8 ML2 compliance across all 8 Essential 8 categories.
- This is administratively and logistically difficult.

Macquarie's Solution.

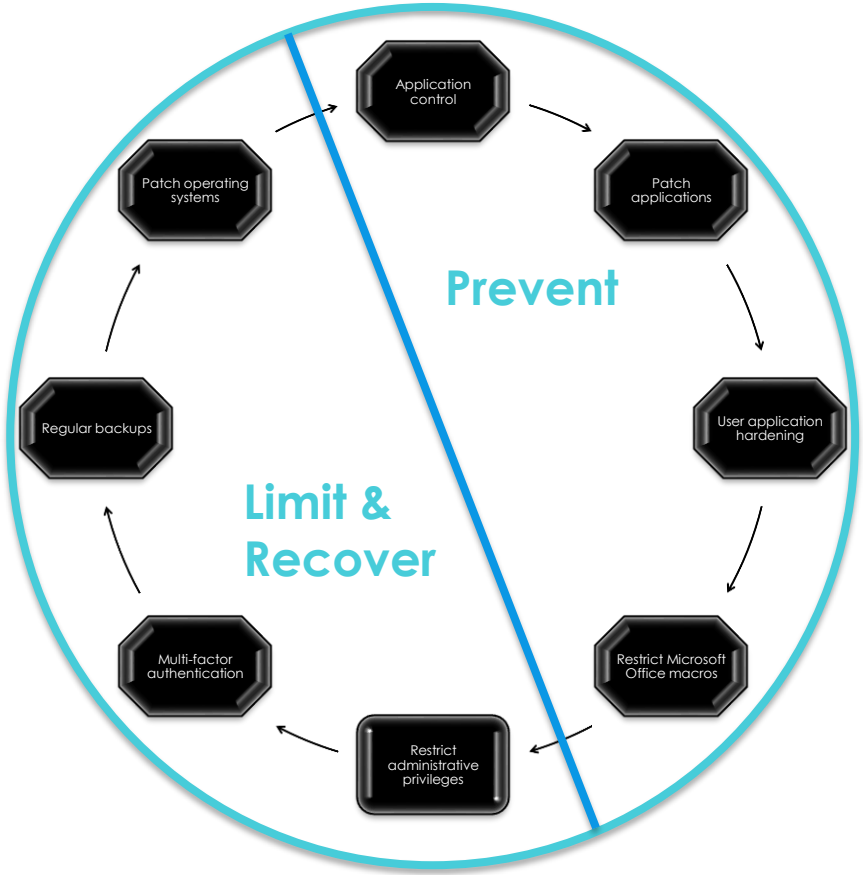
- Secure AVD (Azure Virtual Desktop) acts as a moat and drawbridge into sovereign cloud infrastructure.
- Isolated environments allow researchers to communicate securely, meet ML2 and continue grant-funded work.

Secure | Compliant | Agile

Essential 8 & Managed AVD

The Australian Cyber Security Centre lists 8 cyber security strategies to protects Australian businesses from the growing risk of cybercrime while protecting both their clients and stakeholders.

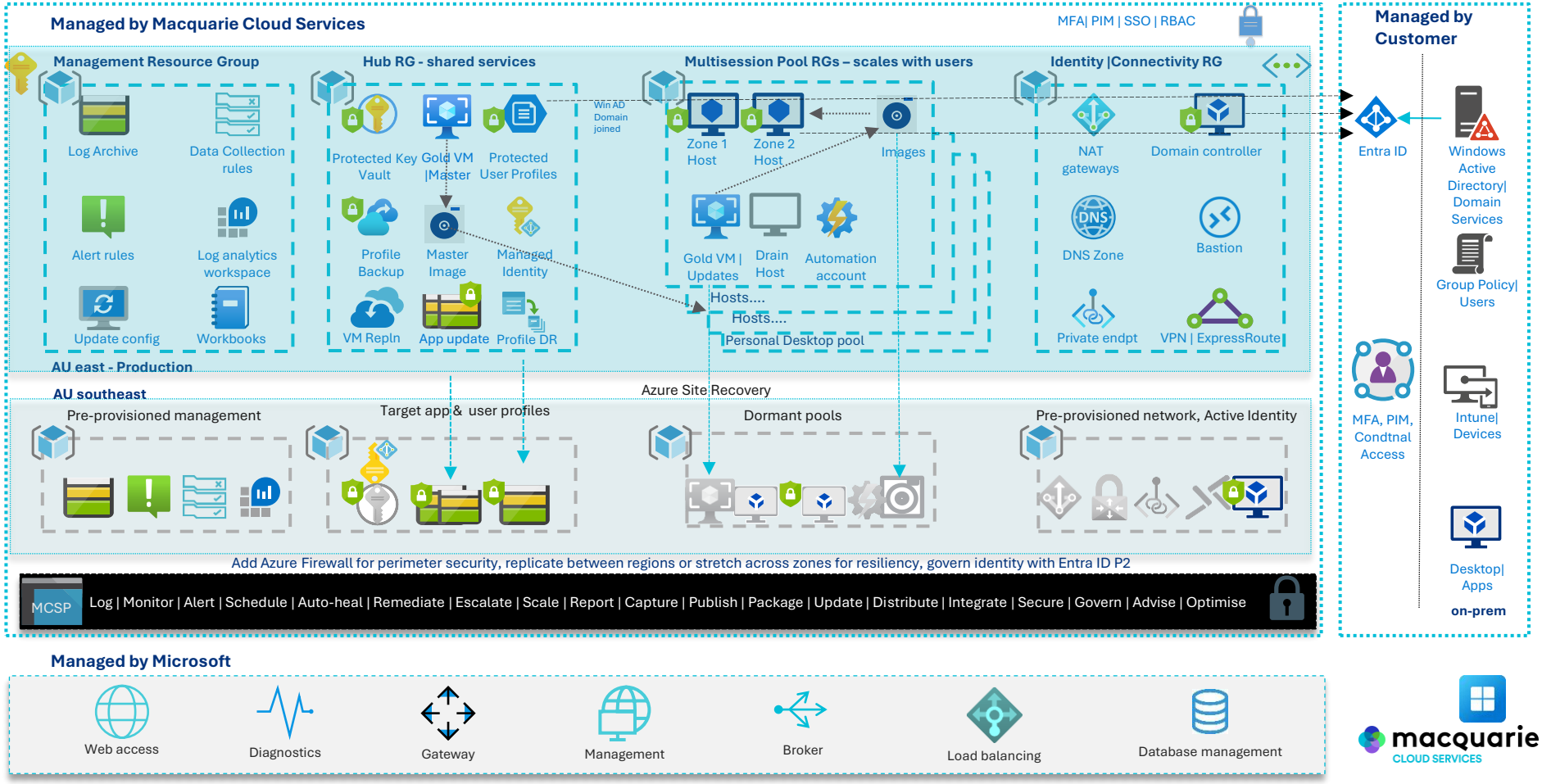
Macquarie Cloud Services can help with implementing strategies through Managed AVD baselines and a suite of optional services.



Empowering Research with a secure enclave in the CAUDIT Cloud

Feature	Benefit	Outcome
Remote Research Enablement	Access research tools and datasets from anywhere (truly hybrid), securely.	Researchers can work from any device, anywhere, without compromising data security, achieved through automated zero trust baselines.
Graphics Acceleration for Scientific Workloads	Run simulations, modelling, and graphics-heavy visualisation with GPU-backed VMs.	High-performance computing on demand without needing local hardware provisioned for peak usage.
AI-Ready Infrastructure & Inferencing	Support for Microsoft Fabric, Azure AI Studio / Foundry, Jupyter Notebooks, and on-prem models	Researchers can access, run, and fine-tune models securely—whether cloud-hosted or local—including inferencing workloads with GPU acceleration and full data control.
Data Protection & Sovereignty	Encryption in transit and at rest, with governance even outside Microsoft Cloud	Sensitive research data stays protected and compliant, locked down to a location within Australia to provide data residency, protection & sovereignty.
Cloud-Native Identity with Entra ID	Secure access with password-less login, MFA, and conditional access	Researchers get seamless access; IT gets peace of mind.
Essential 8 Maturity & Compliance	Security baselines implemented and maintained by MCS	Built-in compliance aligned with Australian government standards.
Cost Efficiency	Macquarie's AVD infrastructure runs at $26 per user/month	World-class research environments at a fraction of traditional VDI cost.
Evergreen service	Changes to industry, vendor and technologies are maintained within the managed service.	Keep desktop infrastructure up-date, innovative and agile.

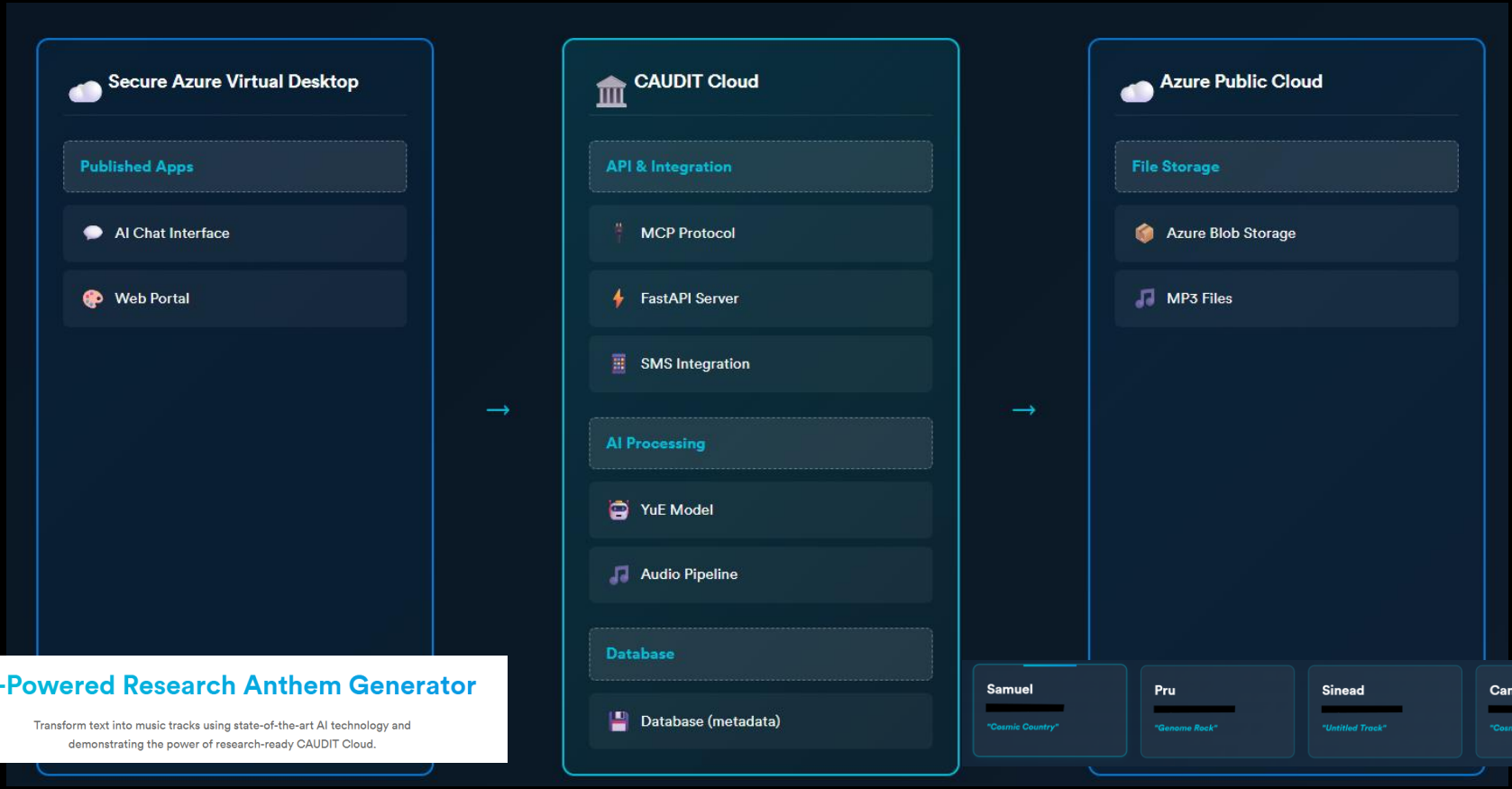
Managed AVD - the moat of your secure CAUDIT Cloud.

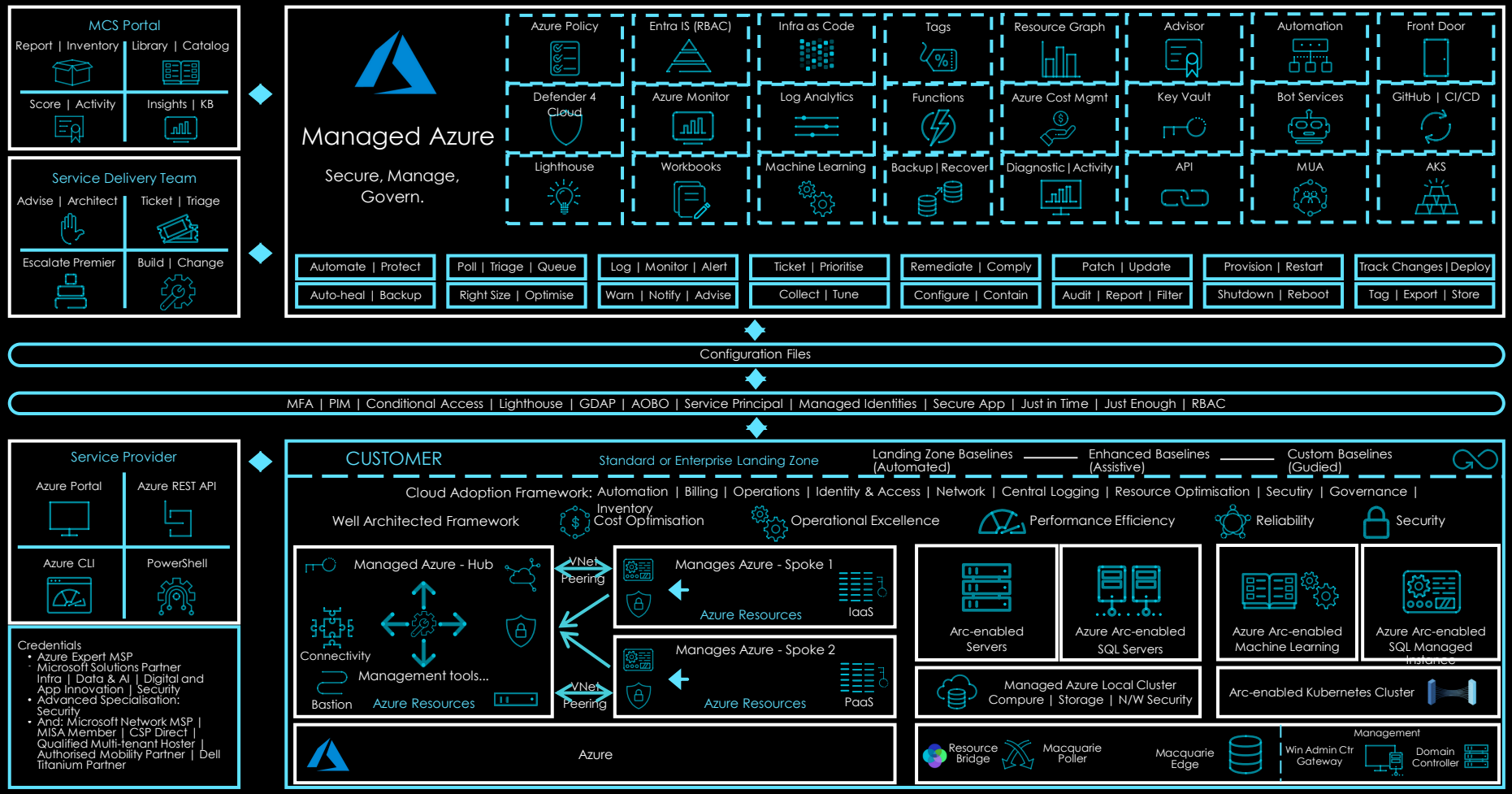


Zero Trust baselines

	1. Verify Explicitly	2. Use Least Privileged Access	3. Assume Breach
Identities	• Hybrid or cloud native hybrid identity with Azure Domain Controller, Entra ID joined session hosts or Entra Domain Services, so users access desktops with verified Windows AD or Entra Id identities. • Advisory Services • Access Reviews of Entra roles & PIM	• Privileged Identity Management • Do not allow users to log on until successful Entra Connect sync. • Identity Governance access reviews	• Break glass account protection
Apps	• Access Reviews of service principals and applications /app reg	• Enable corporate identities on desktops and apps with least privileges. A dedicated user account restricts access by joining session hosts and user profiles to the selected identity provider. • Multi-session host users cannot install software directly. • Control which applications are allowed to run with Windows Defender Application Control.	• O365 apps may be updated with the scheduled desktop OS updates, if selected. • MSIX app updates
Users & Devices	• MFA • Conditional Access • Single Sign-on • Verify AVD users through Defender for Endpoint integration with AVD session hosts • Session & connection behaviour config (Session locks, inactive time, disconnect policies etc.)	• Configure User Profile Files with private links • Users log on only after post deployment checks are run. • Unauthorised users cannot access apps, hosts & data • Deploy Key Vault to protect user credentials. Secrets are stored in the hub Key Vault shared service, protected through access control. • Access Reviews of AVD group membership • Device redirection configuration (USB & screen capture protection, clipboard transfer etc.)	• Storage account encryption at rest and in transit • Enforce Secure Transfer on User Profiles Storage • Protect user files with Defender for Storage sensitive data discovery. • Customise and deploy new host pools from the MCS portal to cater for granular user groups • Device redirection configuration (Drives and storage, location etc.)
Data	• Verify AVD users on physical endpoints	• Macquarie enables secrets storage in Key Vault with Defender protection. • Defender for Storage is enabled on the storage accounts that store user profiles to detect unusual and potentially harmful attempts to exploit storage services.	• Protected/immutable backups and replication of user profiles for resilience • Stateless session hosts can be redeployed & drained from the MCS portal • Reduce risk with centralised data storage in the cloud, not on devices • Automated malware quarantining on blob storage
Infra & hosts	• Cloud Security Posture management. • Secure Score	• Multi-user authorisation for Azure Backups • Macquarie enables network controls of Service Tags, FQDN tags, Network Security Groups, TLS 1.2, and outbound connectivity to the Azure Virtual Desktop infrastructure over the HTTPS connection. • Access Reviews of privileged Azure resource roles in an AVD context (Plan 3) • Encryption of data at rest & in transit: Host encryption is enabled by default when a new host pool is provisioned. Data stored on the VM host is encrypted at rest and flows encrypted to the Storage service. Temporary disks and ephemeral OS disks are encrypted at rest with platform-managed keys when end-to-end encryption is enabled. The OS and data disk caches are encrypted at rest with platform-managed keys. • Segregate host pools by organisational units (OUs) if managed by group policies on Windows AD	• Macquarie assists in scanning, alerting and remediating OS level vulnerabilities. • Trusted Launch is enabled by default • Schedule desktop OS updates & on demand for out of band updates. Macquarie enables patching the base operating system images monthly to ensure that newly deployed machines are as secure as possible. • Automated deployment scheduling may be set using MCSP. Defender for Cloud provides host level detection and threat alerting. • Central logging & automated remediation of diagnostics, resource & activity logs. • Apply & auto-heal regular Defender AV updates to session hosts. • Deploy & remediate Azure Defender for Servers
Network	• Cloud Security Posture management. • Secure Score	• Segmented network design with hub (management VNet/Subscription) and spokes (host pools VNet/Subscription) topology. • Azure Bastion enforces secure just-in-time access to virtual machines over the Internet. • Allow specified network traffic flows between hub & spoke VNETs with Azure Firewall. (Azure Firewall Premium) .	• Macquarie advises upon DFC secure configuration recommendations and remediates agreed actions as contained within the AVD environment. Defender uses machine learning models to identify and flag malicious traffic activities. • Macquarie triages AVD specific Sev 1 alerts and advises upon less critical alerts • Route default Internet egress through zone-redundant NAT gateways • Monitor network activities for malicious activity with Network intrusion detection and prevention system, log, reports it, and optionally block it (Azure Firewall Premium) • Prevent traffic flows between workloads with Azure Firewall. (Azure Firewall Premium)

Enter to win a Dell laptop at the MCS stand!




MCS Portal
Report | Inventory | Library | Catalog
Score | Activity | Insights | KB
Service Delivery Team
Advise | Architect | Ticket | Triage
Escalate Premier | Build | Change
Managed Azure
Secure, Manage, Govern.
Azure Policy
Entra IS (RBAC)
Infra as Code
Tags
Resource Graph
Advisor
Automation
Front Door
Defender 4 Cloud
Azure Monitor
Log Analytics
Functions
Azure Cost Mgmt
Key Vault
Bot Services
GitHub | CI/CD
Lighthouse
Workbooks
Machine Learning
Backup | Recover
Diagnostic | Activity
API
MUA
AKS
Automate | Protect
Auto-heal | Backup
Poll | Triage | Queue
Right Size | Optimise
Log | Monitor | Alert
Warn | Notify | Advise
Ticket | Prioritise
Collect | Tune
Remediate | Comply
Configure | Contain
Patch | Update
Audit | Report | Filter
Provision | Restart
Shutdown | Reboot
Track Changes | Deploy
Tag | Export | Store
Configuration Files
MFA | PIM | Conditional Access | Lighthouse | GDAP | AOBO | Service Principal | Managed Identities | Secure App | Just in Time | Just Enough | RBAC
Service Provider
Azure Portal
Azure REST API
Azure CLI
PowerShell
Credentials
• Azure Expert MSP
• Microsoft Solutions Partner Infra | Data & AI | Digital and App Innovation | Security
• Advanced Specialisation: Security
• And: Microsoft Network MSP | MISA Member | CSP Direct | Qualified Multi-tenant Hoster | Authorised Mobility Partner | Dell Titanium Partner
CUSTOMER
Standard or Enterprise Landing Zone
Landing Zone Baselines (Automated)
Enhanced Baselines (Assistive)
Custom Baselines (Gudied)
Cloud Adoption Framework: Automation | Billing | Operations | Identity & Access | Network | Central Logging | Resource Optimisation | Secutiry | Governance |
Well Architected Framework
Inventory
Cost Optimisation
Operational Excellence
Performance Efficiency
Reliability
Security
Managed Azure - Hub
Connectivity
Management tools...
Bastion
Azure Resources
VNet Peering
VNet Peering
Manages Azure - Spoke 1
Azure Resources
IaaS
Manages Azure - Spoke 2
Azure Resources
PaaS
Azure
Arc-enabled Servers
Azure Arc-enabled SQL Servers
Azure Arc-enabled Machine Learning
Azure Arc-enabled SQL Managed Instance
Managed Azure Local Cluster
Compure | Storage | N/W Security
Arc-enabled Kubernetes Cluster
Resource Bridge
Macquarie Poller
Macquarie Edge
Management
Win Admin Ctr Gateway
Domain Controller

Logical Architecture - Managed Edge

Site Recovery

Azure Policy

Update Management

File Sync

Monitor

Defender

Macquarie Cloud Services Portal

Applications .NET Java Exchange

Windows

Linux

Containers

Cognitive Services

Data Services

Virtual Machines
Any size and configuration

Azure Kunernetes Service
Managed container platform

Windows Admin Centre

Windows AD Server

Firewall

Internet & Gateway Services

Resource Bridge

Macquarie Poller

Azure Local
Hyperconverged Infrastructure Software Stock

Hyper-V

Storage Spaces Direct

SDN

Dell APEX Cloud Platform for Azure Local

Managed Edge

Secure, Manage, Govern.

- Well-Architectured Framework
- Cloud Adoption Framework
- Landing Zone & Baselines

Arc Enabled

Custom Location

Significant Cost Saving Potential with Managed Edge

1

Azure Hybrid Benefit

Maximise the value of your on-premises licenses and modernize existing infra on Azure Local at no additional cost.

Leverage Windows Server Datacentre core with Software Assurance licenses to waive the host service fee and

2

Save through DELL PowerFlex SDS

Scale storage independently of compute. Great when you want to manage capacity and performance requirements or want to scale out a standard compute build.

3

Reduce Operational Costs

Hand over the management of your existing infrastructure to Macquarie and reduce the time it takes for you to build, configure and connect cloud infrastructure.

Built for the Sector, With the Sector

Thank you.

Considerations as you bring AI closer to research projects.

Cost

Predictable bill

Operational Efficiency

Risk

Pace of innovation

Skilling

Security & confidentiality

CAUDITCloud

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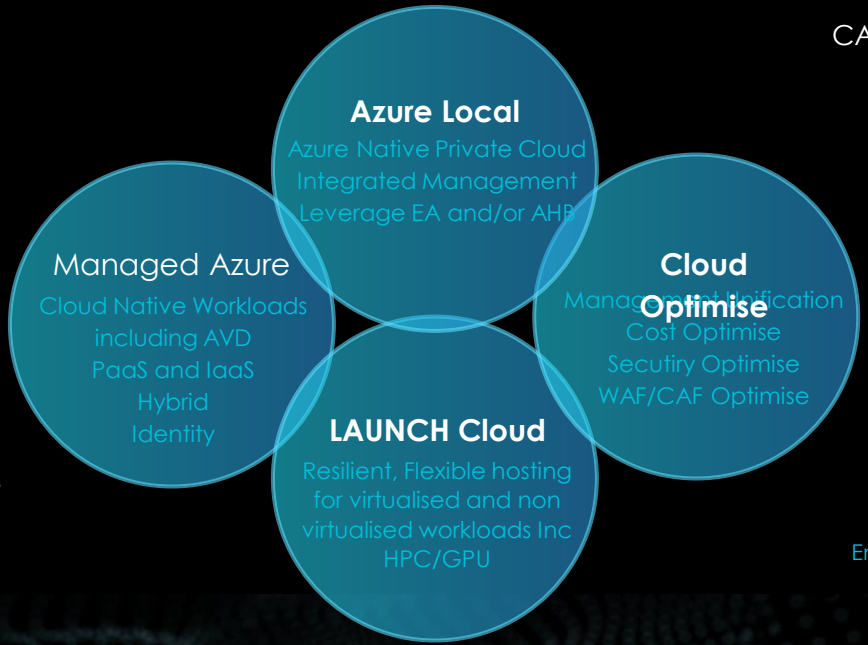
CAUDIT Cloud Suite

Private Cloud (LAUNCH)
Public Cloud (Azure)
Azure Stack HCI
Hybrid Cloud Integration
Datacentre



CAUDIT CloudCustom Suite

GPUaaS
HPCaaS
Classified Workloads
Colocated Bespoke

CAUDIT Cloud Migration Suite

Cloud On-Boarding
Cross-Cloud Migration
Multi-Cloud Integration Inc
Azure Native Management

CAUDIT Service Suite

HMC/CMND 247 (80+ NPS)
Embedded Consultancy
Environment Migration Services
Run-book capable
SOC/SEM Integration
Managed Security

In Summary – Why CAUDIT Cloud?

World-leading customer experience, and:

NPS

+92

Security by Design

Purpose-built on CAUDIT Cloud infrastructure with ISO 27001 certification, PCI DSS compliance, and Tier III data centres. Access controlled through Secure Azure Virtual Desktop ensures your sensitive data never leaves the protected environment.

AI-Powered Innovation

Advanced AI capabilities running in a sovereign cloud environment. Our demonstration showcases generative AI for music creation, but the same secure architecture supports any AI workload requiring data sovereignty and compliance.

Cost-Effective Excellence

Avoid legacy lock-in and cloud bill shock. Our hybrid approach uses the right cloud for the right workload—sovereign infrastructure for sensitive processing, public cloud for scalable storage.

Proven Expertise

Backed by 200+ government-cleared engineers and Azure Expert MSP certification (4 consecutive years). We're Australia's #1 rated cloud provider with an NPS of +92.

Complete Transparency

Track your research workflows in real-time with comprehensive monitoring and audit trails. Know exactly where your data resides and how it's being processed.

Trusted Partnership

Award-winning customer service with personal accountability. We become an extension of your team, providing deep expertise and responsive support when you need it most.

Let's talk.

Ben Svalbe
Pauline Thomas

Macquarie Cloud Services

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