



Engineering Consulting

IT infrastructure for data-heavy, technically demanding consulting environments

CMTG.COM.AU



The Reality of IT in This Sector

Engineering consulting firms working across mining, oil and gas, and civil projects operate in high-stakes, data-intensive environments. CAD files, simulation models, project data sets, and collaborative design environments are the core of what these businesses produce. The computational demand is substantial, the project timelines are unforgiving, and the data is irreplaceable. When IT infrastructure does not perform, engineers cannot work. When data is lost or compromised, projects are at risk and client relationships are damaged.

The Pressure Points

- CAD, BIM, and simulation workloads require consistent high-performance compute that standard cloud environments and shared infrastructure cannot reliably deliver
- Large project data sets require fast, reliable storage and the ability to access and collaborate on files from multiple locations without performance degradation
- Multi-site and remote access for engineers working across project offices, client sites, and home environments needs to work seamlessly and securely
- Project data sovereignty matters. Engineering IP, client specifications, and project documentation cannot sit on infrastructure subject to foreign government access legislation
- The consequences of downtime during a live project phase are significant: delayed deliverables, contract penalties, and reputational damage that affects future work
- Growing firms are taking on larger, more complex projects and their IT infrastructure needs to scale with that ambition without requiring a capital investment cycle every two years

Why Standard IT Falls Short

Public cloud handles general business workloads well. It does not handle GPU-intensive engineering applications consistently. .

Shared infrastructure means variable performance at exactly the moments when engineers need certainty. And most managed IT providers do not have the infrastructure depth to support the kind of compute environment that a serious engineering consulting firm actually needs. The market for WA engineering consulting is competitive. The firms that win are the ones that can produce faster, collaborate better, and keep delivering when things get hard. continuity issue.

What CMTG Brings to This Sector

1



GPU-ACCELERATED VIRTUAL DESKTOPS:

CMTG's Desktop as a Service platform, powered by Citrix and backed by NVIDIA L4 and L40 GPU infrastructure, delivers full workstation-class performance from any device, anywhere. Engineers get consistent, high-performance compute without the capital cost of individual high-spec workstations, and the environment scales as the team grows.

2



SOVEREIGN, HIGH-PERFORMANCE STORAGE:

IBM enterprise storage with world-record IOP performance handles large file environments and simultaneous multi-user access without degradation. Project data stays in WA on infrastructure CMTG owns and is directly accountable for.

3



MANAGED IT THAT UNDERSTANDS TECHNICAL ENVIRONMENTS:

CMTG's team includes 36 technical specialists who understand engineering IT environments. Proactive monitoring, managed connectivity, and a dedicated Technical Account Manager who knows the business mean that IT runs reliably in the background rather than demanding attention.

4



DISASTER RECOVERY THAT ACTUALLY WORKS:

Quarterly-tested DR with sub-1-hour recovery time objectives. In the event of a system failure mid-project, recovery is fast and the data is intact. Immutable backups mean that ransomware does not end a project.

What It Looks Like in Practice

A Perth-based engineering consultancy working across civil and resources projects moved its design and project environment onto CMTG's DaaS platform to address performance inconsistency that was affecting productivity across a team of engineers working from multiple locations.

The GPU-backed virtual desktop environment delivered workstation-class performance from any device, the project data moved onto CMTG's sovereign storage platform, and the NOC monitoring replaced an arrangement where IT issues were only discovered when an engineer raised a ticket. The outcome was a faster, more reliable working environment and the ability to take on larger, more data-intensive projects with confidence.

Relevant Credentials

1



GPU INFRASTRUCTURE:

NVIDIA L4 and L40 GPUs deployed on CMTG's sovereign WA platform, purpose-built for compute-intensive workloads

2



VIRTUAL DESKTOP PLATFORM:

Citrix 2025 MSP Partner of the Year, delivering enterprise-grade DaaS with zero-trust access controls

3



STORAGE PERFORMANCE:

IBM enterprise storage with world-record IOP benchmarks, co-developed cyber-resilience architecture presented at IBM TechX globally

4



SOVEREIGN INFRASTRUCTURE:

Every byte of client data stays in Western Australia, under Australian law, on infrastructure CMTG owns

If your firm is growing, taking on more demanding projects, or has engineers whose productivity is being limited by IT that does not perform consistently, CMTG can show you what the right infrastructure looks like in practice. The conversation is straightforward and the outcome is specific.