RES BUSINESS IT

Reimagining GIS for a flexible future: e2m's cloud journey



e2m is a forward-thinking engineering and environmental consultancy, combining deep scientific expertise with a collaborative, client-first approach.

ABOUT E2M:

- Founded in 2015, e2m has grown to more than 60 people.
- The team delivers ecological assessments where accuracy, timing and data-driven insight matter.
- Much of this work depends on Geographical Information System (GIS) mapping and analysis, requiring strong storage, performance, responsive applications and reliable access across locations.

THE CHALLENGE:

- As e2m entered a significant growth phase, their IT environment needed to scale with them.
- They required a resilient platform to support critical work, reduce reliance on office-based infrastructure, and enable secure work from anywhere.

THE OUTCOME:

- Working with RES. Business IT, e2m maintained consistent GIS performance while improving access to critical data for a growing, distributed team.

Maintaining GIS performance while reducing office dependency

e2m's earlier environment reflected a common growth path. Key project data was housed on a Network Attached Storage platform in the office, with users working locally. During the COVID pandemic, VPN access made working from home possible, but as the business expanded this approach began to limit performance, scalability, and the user experience.

For GIS teams, performance is tightly linked to productivity. Spatial workloads are sensitive to latency and throughput, and those factors directly affect how quickly specialists can manage complex data models and deliver outputs.

e2m also required stronger operational resilience. The business had previously experienced disruption due to natural disasters, and with access to critical data tied to one location, local outages like this became a much more significant business-wide issue.

At the same time, support capacity was stretched to its limits. As the team grew, so did their partner requirements. At that point, the direction became clear: e2m needed a platform that could scale with the business and support specialist workflows, without tying critical access to a single office or a single support resource.

> "Over time we identified that the requirements were going to be beyond our current platform. We wanted to work on a cleaner, more efficient platform – one where our organisation could access the right information at the right time."
> **– CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M**



Delivering the solution

When e2m partnered with RES. Business IT, there was a simple line of focus: Reduce dependency on the office, strengthen resilience, and maintain a desktop experience that remains responsive and consistent for specialists

RES started with discovery and validation, focusing on how e2m teams work day-to-day, with specific attention on GIS users. From there, RES ran proof-of-concept testing to confirm what would and wouldn't hold up for spatial workflows. That approach protected the user experience and guided design decisions before committing to rollout.

The solution centred on running user desktops and applications in Microsoft Azure, close to the data they rely on. This ensured the low latency and high throughput required for spatial analysis, while enabling secure access for distributed teams.

"We knew GIS data involves large datasets that need very low latency and high throughput. That works well when everything is running locally, but once you move to the cloud you can run into challenges. We were mindful of that throughout the process, and it was one of the reasons we hadn't moved earlier. Without the right support, it can be difficult to get right." – **CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M**



Delivering the platform with minimal disruption

To kick things off, RES focused on understanding how performance impacts e2m's key workflows, including application dependencies and the demands of GIS users. From there, options were tested early to confirm what would and wouldn't work under real conditions.

This staged delivery allowed for data to be moved from on-premises storage into Microsoft Azure in phases. Performance and configuration settings were then refined as the environment matured, using direct feedback from GIS users. Once the platform was stable and tuned, e2m transitioned into managed services for ongoing support and continuous improvement.

"We worked through a number of options and eventually landed on a solution that allowed our GIS team to keep working much the same as before, while also giving us the ability to scale in a way we couldn't previously."

– CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M



How RES. Business IT delivered the solution

A cloud foundation for critical GIS data

Azure storage was established for key project information, aligned to the performance demands of spatial workflows.

Consistent access for specialist tools and applications

Azure Virtual Desktop and Azure virtual machines give specialists a consistent way to access applications and data, without relying on VPN connections to office-based desktops.

A performance-led design for spatial workflows

Desktops and applications were delivered from Azure, positioned close to the data they rely on to ensure responsive performance for large files and processing-heavy GIS tasks.

A stronger access baseline built into daily work

Multi-factor authentication and conditional access policies helped standardise access across users and devices and improve security

Ongoing support through managed services

Managed services reduced reliance on internal resources and supported continuous improvement as needs evolved.

Delivering measurable business improvements

With critical data and workflows now hosted in Azure, e2m reduced dependency on the office for access to core systems and data. Remote work became simpler and more consistent, with fewer moving parts to troubleshoot, and as the business continued to grow, the platform supported a more streamlined approach to onboarding and device setup.

Security improved in practical ways too, with multi-factor authentication and conditional access policies helping e2m standardise access across users and devices. Coupled with security awareness training, e2m were now able to better support user habits across the organisation.

KEY OUTCOMES

Continuity improved through reduced reliance on head office for access to critical GIS data and workflows, supporting delivery across multiple locations.

GIS performance stayed consistent with the environment designed and tuned to support real-world spatial workflows.

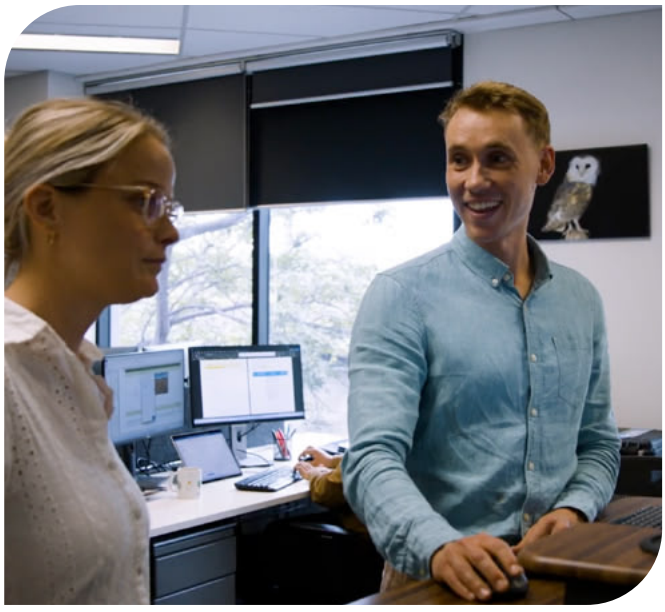
Remote work became simpler with fewer access and troubleshooting issues compared to VPN-dependent patterns.

Scaling and onboarding became easier, supported by a platform that can grow alongside projects, data, and workloads.

Security maturity improved through standardised identity controls and ongoing security awareness training.

“The solution went in around May, and since then we’ve had far fewer issues. The network just works as it should. We also improved our onboarding. It’s more streamlined, the applications are approved, and each device comes with the environments our teams need.”

– CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M





Supporting long term growth through partnership

For e2m, this work supported a broader platform shift backed by a tailored managed services model. Looking towards the future, the focus now is about consolidation, refining processes, and keeping the environment fit for purpose as requirements evolve. With this flexibility e2m now have a clearer pathway to extend the approach to additional data-heavy workloads as needs mature – something that wasn't possible before.

"We're now looking to refine our processes and make them as efficient as we can. RES are always open to chat and explore what that could look like." **– CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M**

Key lessons from e2m's platform shift

e2m's experience highlights a few principles for performance-sensitive workloads:

Start with the workflow and validate early, so the end-user experience holds up under real conditions. Design for latency and throughput from day one. Deliver in stages, tune with user feedback, and support the environment with a model that can keep pace as the business grows.

"We didn't want to expose the team to a new and unfamiliar experience straight away. That's why, together with RES, we ran a proof of concept. We tried a few different approaches, iterated through them, and then committed to the solution that would scale the business the way we needed." **– CAMERON DAVEY, CHIEF COMMERCIAL OFFICER, E2M**

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