

Enabling integrated local government processes in the cloud - City of Cockburn

Case Study

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Key words: Geoinformation/GI; Land management; Spatial planning

SUMMARY

The City of Cockburn, located 20km south of Perth, is home to 130,000 people, with the population expected to grow to 170,000 by 2026. The city encompasses 23 suburbs and offers attractions such as wetlands, employment opportunities, and community facilities. It provides various local government services, including support for businesses, environment and waste management, health and safety, infrastructure, and recreation. □□ The city relies on TechnologyOne ERP and ESRI ArcGIS to manage tasks and requests, streamlining many manual processes for field workers. However, the scheduled migration of TechnologyOne ERP to the cloud by November 2024 posed a challenge. Over 20 years, numerous integrations between TechnologyOne and ArcGIS had been developed using SQL and Python. These integrations, essential for exchanging requests and tasks, would not work in the cloud environment. The original developers had left, and the new team found the existing integrations difficult to manage due to their complexity and lack of documentation. □□ To address this, the city chose Safe Software's FME for integration, with support from 1Spatial. The GIS team, led by Nathan Sharp, aimed for a tool that was visually self-documenting for knowledge transfer. 1Spatial, a leading partner of Safe Software, was engaged to develop a Proof of Concept (PoC) solution for the city's waste management integration, the most complex challenge. They also provided tailored FME training to the GIS and Business Systems teams. □□ Initially, the city planned to use secure File Transfer Protocol (sFTP) for data exchange. However, midway through the PoC development, they switched to RESTful Web Services, which offered more robust and responsive data exchange. FME's Change Detector was used to monitor TechnologyOne and ArcGIS for changes, triggering workflows and keeping systems synchronized. The solution exchanged data every two minutes. □□ The PoC was completed in two months, and all integrations were finished within six months, ensuring a smooth transition to the cloud. The city successfully met its cloud migration deadline and can now maintain and develop streamlined data flows between systems. This modernization allows for efficiency and scalability in future

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integrations. The Business Systems team also used FME to integrate on-premise reporting and compliance solutions with TechnologyOne, ensuring continuity and planning further integrations. □ □ This comprehensive approach has positioned the City of Cockburn to effectively manage its growing community and technological needs. □

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