

CitiPower and Powercor Equip Mobile Engineers with Productivity-boosting Apps with CA API Gateway



CLIENT PROFILE

Industry: Utilities

Organizations: CitiPower and Powercor

Employees: 2,133 (as at 31 December 2015)

BUSINESS

CitiPower and Powercor manage the electricity distribution networks in Victoria, delivering electricity to nearly 1.1 million homes and businesses. Together they employ more than 2,100 people and serve a population of 1.96 million.

CHALLENGE

To enable its mobile workforce to be more efficient, the companies needed a cost-effective and reliable way to integrate their back-end infrastructure with SaaS and mobile platforms.

SOLUTION

CA API Gateway allows the rapid build of workplace apps, deployment and support of vendor apps and the ability to integrate them with cloud-based services that rely on secure access to corporate assets.

BENEFIT

With CA API Gateway, users are more productive on the move. The solution has simplified management and security of APIs and accelerated time-to-market for new apps and cloud services.

Business

Delivering electricity to
1.96 million people

CitiPower and Powercor are the most efficient and reliable urban and rural electricity distribution networks in Victoria. They own and manage the poles and wires that deliver electricity to approximately 1.1 million homes and businesses, servicing a population of 1.96 million. They employ more than 2,100 people in 13 offices and depots in Melbourne and across central and western Victoria.

As a major provider of electricity distribution services, they play a central role in building and maintaining key infrastructure to support Victoria's growth and prosperity.

The companies are operating in one of the most dynamic periods ever experienced within the energy sector, and is focused on preparing itself for the future to ensure it is well placed for navigating a pathway through the new operating environment.

Challenge

Mobilising the workforce

In response to the changing environment, CitiPower and Powercor are focused on improving their digital presence.

To enable this, they established a digital enablement team responsible for embracing everything that is digital and with a focus on innovating service delivery and exploring new channels.

The team was tasked with finding a modern way for its engineers to get easier access to more reliable information when on the move. They had attempted a number of mobile apps targeted at engineers, and in particular, they needed to simplify and secure the development and integration of mobile apps and cloud services to maximise efficiency.

"Our experience was they were costly and time-consuming to develop and maintain," explains Ben Jerrim, Technical Lead for the Digital Enablement Team. "They were based on file transfers (FTP) and private virtual networks (VPN) that mimicked interaction with Application Programming Interfaces (API) – engineers even needed special SIM cards in their device to use one of them."

It became clear that to achieve its ambitions the businesses needed a more efficient way to open up their back-end systems and integrate with SaaS and mobile platforms – this capability is a key pillar in supporting an efficient, world class mobile workforce.

Solution

Simple API management

The introduction of CA API Gateway enabled the rapid build of a fleet of native iOS mobile apps, deployment and support vendor apps, and the ability to integrate them with cloud-based services that rely on secure access to corporate assets.

CA Technologies delivered a CA API Gateway proof-of-concept which delivered more than the business had initially expected.

“Our apps already get used up to 50,000 times every month.”

Ben Jerrim

Technical Lead for the Digital Enablement Team,
CitiPower and Powercor

“We could securely publish our SOA SOAP services as REST APIs, proxy SaaS APIs for internal consumption and handle single-sign on (SAML) through the solution, and integration with our enterprise user directory for authentication only took a matter of minutes to set up – we realised that we really needed this solution in our environment,” says Jerrim.

The proof-of-concept led to CitiPower and Powercor installing and configuring a three tier CA API Gateway cluster in just one week. The solution’s simplicity meant that only one team member was needed to develop and publish the company’s rapidly growing API and single sign-on (SSO) implementation, with an additional resource providing support and coverage for peak development periods.

Since its introduction, the companies have opened up back-end systems to approximately 10 mobile apps and around 20 cloud-based services. Those back-end systems include SAP, GE’s outage management system, Active Directory and Oracle’s enterprise service bus. Cloud API and SSO integration is provided to applications such as Salesforce, SuccessFactors, ClickSoftware and Concur.

Contractors can now use the gateway to facilitate their web-based interactions with the control room, as well as notifying the digital enablement team of outages using SMS messages that integrate with an outage management system via the gateway.

“These are use cases we would never have been able to support previously, and didn’t see coming. Being able to support these channels and match the velocity that requires them to be available is a significant advantage for the business,” adds Jerrim.

Currently approximately 2,000 employees and contractors use the mobile apps and cloud services that depend on APIs and SSO to access corporate assets, and that number is set to grow.

“Our apps already get used up to 50,000 times every month – CA API Gateway can easily scale and we have confidence in its ability to accommodate new projects as they go live,” comments Jerrim.

CA API Gateway acts as a central policy enforcement point between the business and the end user, and also combines policy management with runtime policy enforcement – setting up security is straightforward.

“We have set up standard patterns inside CA API Gateway, which we simply apply to each API or policy that we publish so it inherits the correct authentication requirements for the API namespace that invokes it,” says Jerrim. “This has enabled us to leverage solutions, such as its cloud-based mobile field service management software, that otherwise wouldn’t have met our stringent security policies.”

CA API Gateway is transparent to the end user. Whenever they use a mobile or cloud-based SaaS app, they log in to a screen published by the solution.

“We authenticate them, often using two-factor authentication, generate a token and send them on their way,” adds Jerrim.

The solution also simplifies triage and troubleshooting through providing visibility of API requests and responses. This enables CitiPower and Powercor to pinpoint the root cause of application issues quickly and accurately.

Benefit

Enabling a mobile workforce

“CA API Gateway has allowed us to fully embrace cloud and mobile in the knowledge that our corporate information and systems are fully secure.”

Ben Jerrim

Technical Lead for the Digital Enablement Team,
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The introduction of the CA API Gateway has simplified the management and security of its APIs which has enabled the business to mobilise its corporate assets faster and more effectively.

“We no longer waste time reinventing how we connect to our corporate assets,” Jerrim comments. “We have standard patterns that our enterprise API supports and all our integrations follow these patterns. They are approved, penetration tested and scalable.”

He continues, “Cloud integration and authentication is now the part of a project people worry about the least, that’s a nice place to be compared to where we were several years ago. We’re estimating our involvement with most projects in units of hours now; once it was weeks.”

The CA Technologies solution has also enabled CitiPower and Powercor to transform their existing legacy services into modern RESTful interfaces.

“With CA API Gateway we can publish a REST API from SOAP services hosted in enterprise applications such as SAP without the need for changes to the source system,” Jerrim explains. “This puts a lot of agility back into older systems that may have been implemented before modern mobile integration patterns existed, and it allows us to decouple the authentication approaches these systems may demand and modernise these as well.”

With CA API Gateway securing their corporate assets, CitiPower and Powercor have been able to:

- Significantly improve workforce productivity
- Accelerate time-to-market for new mobile apps and cloud services
- Extend the life of its legacy systems
- Reduce mean-time-to-repair for application issues
- Consolidate user sign on and passwords.

Jerrim concludes, “CA API Gateway has allowed us to fully embrace cloud and mobile in the knowledge that our corporate information and systems are fully secure.”



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