

A Softchoice Case Study

Softchoice shows ESA the way to robust disaster recovery

Overview

Industry

Electrical safety promotion and enforcement in Ontario, Canada.

Business challenges

No formal disaster recovery solution in place to support a growing portfolio of online services.

Technology solutions deployed

Live replication to Sungard data center to meet strict RPO and RTO requirements.



The Electrical Safety Authority (ESA) is a regulator and advocate for electrical safety mandated by the Government of Ontario.

ESA strives to protect the people of Ontario and reduce the amount of electrical-related harm across the province by engaging in primary activities, including identifying and targeting leading causes of electrical safety risk; ensuring compliance with regulations; promoting awareness, education, and training; and working with stakeholders to gain insight and continuously improve to ensure Ontario remains safe from electrical harm. ESA's annual workload includes 500,000 on-site inspections, answering 600,000 calls, and interactions with 15,000 master electricians.

In administering these laws, ESA conducts a broad spectrum of activities promoting electrical safety, ranging from training and registrations to inspections and enforcement actions. As the ESA evolved and implemented a growing set of online services to serve its evolving clientele, a formal disaster recovery (DR) strategy was required. More of its stakeholders were coming to rely on the ESA's solutions 24/7, requiring dependable DR that could keep those services running and also show tangible value to the ESA's executive leadership.

The ESA had worked with Softchoice as far back as 2009 on other projects. After an RFP process, they selected Softchoice's proposal to build out a DR platform in partnership with Sungard Availability Systems. This implementation has resulted in reliable live replication and rapid recovery, giving the ESA credibility with its stakeholders, as well as deeper insight into how to maintain robust digital services.

Mapping out a digital strategy with DR at the center

The ESA had plans to roll out more than ten new online services, as part of a five-year digital transformation initiative. Before beginning these projects, ESA had relied on a set of aging processes and tools with complex manual processes for employees and external stakeholders. There was no formal DR solution in place.

“In the past, we did not make commitments to systems beyond the hours of 7:30 a.m. to 4:30 p.m.,” explained Kelley Irwin, CIO at the ESA. “If we had overnight outages, the affected solutions could be unavailable until the next business day. When we decided to offer online services as part of our new five-year strategy, we knew that success would require a DR implementation, to ensure those services would be available when and where people wanted to use them.”

Overall, the ESA was going from a 100% manual, paper-driven world to one that was automated and digital, and DR was an important new piece in this transformation puzzle. The ESA sought a DR solution that would ensure its online services were replicated in near real-time and capable of quick recovery from any outages as they occurred. Because the ESA was in the process of transforming the technical service offerings for its stakeholders — with different, more modernized operations— it had to demonstrate that its digital services were reliable and capable of growing alongside the organization as a whole. ESA deployed new services including an online portal for electrical contractors to submit electrical plan documents that are vital to sustaining construction projects, virtual exam offerings to replace in-person exams to obtain a master electrician license, and a route-planning tool for inspectors to optimize the schedule and route for the day and communicate effectively with customers.



“When we decided to offer online services as part of our new five-year strategy, we knew that success would require a DR implementation, to ensure those services would be available when and where people wanted to use them.”

— Kelley Irwin, CIO at the ESA.

At the outset of the DR project, the ESA considered multiple bids and proposals, which ranged from recommendations for buying and deploying a significant new hardware footprint to setting up all of its DR operations in a cloud environment. In partnership with Sungard, Softchoice suggested a more pragmatic solution that met all of the ESA’s technical and financial requirements. Having previously worked with the ESA on a call center and VoIP project, Softchoice had a long-standing relationship with the company that further increased the confidence that this approach would work.

Live replication and DR: Shoring up data and showing value



"Softchoice really listened to what we were trying to accomplish. Instead of trying to sell something generic, they came up with a solution right sized for the company and helped us quantify the benefits that we would recoup from our investment."

— Kelley Irwin, CIO at the ESA.

The DR solution for ESA involved live replication of its production sites to a Sungard data center. This setup enabled ESA to achieve a recovery time objective (RTO) of approximately eight hours, and a recovery point objective (RPO) of about 20 seconds.

RTO defines the amount of time within which operations must be restored after an outage, while RPO pertains to the age of the data that could be recovered after such an incident.

"We now have excellent live replication that happens across all of our Tier 1 servers," said Roger Kim, Director of Infrastructure at the ESA. "All the changes to our data are synced in almost real time — we're not talking about day-old data. So if we were to invoke a DR scenario, we would be looking at very relevant and very recent data. Moreover, we can also leverage this technology to go back further in time, if we see that we had bad data in the last one or two days."

The entire implementation was completed in just six months. The project not only benefited the ESA in a technical sense — i.e., in the form of the improved resiliency of its mission-critical systems and the services running on top of them — but also helped its IT department make a more compelling business case to its leadership about the fundamental value of DR. Everyone got a clearer picture of the potential costs of outages, why it was worth investing in a dependable solution and how DR would support resilient operations.

"Softchoice really listened to what we were trying to accomplish," said Irwin. "Instead of trying to sell something generic, they came up with a solution right sized for the company and helped us quantify the benefits that we would recoup from our investment. In turn, that made it easier for me, as the CIO, to build and sell the business case for robust DR to our executive team."

About ESA



The customer

The Electrical Safety Authority is a provincial authority that administers multiple electricity-related regulations across Ontario. In recent years, it has moved many of its services online to better serve its stakeholders.

The original ask

ESA required a disaster recovery solution that could keep its online services up and running at any hour of the day. Previously, it had made no formal guarantees for system availability outside normal business hours.

The Softchoice value

Softchoice assisted ESA in the deployment of a Sungard DR solution with live replication to a data center, achieving an RPO of twenty seconds and an RTO of eight hours.