

Oncor

Electricity Market Reliance on Oncor's® Advanced Meter System Sparks Comprehensive Resiliency Program Based on Veritas™ Resiliency Platform

Oncor faced technological challenges with its commitment to provide disaster recovery around its Advanced Meter System (AMS) by the end of 2016. The company's IT management found in the Veritas Resiliency Platform a comprehensive recovery automation solution that would enable Oncor to perform alternating failovers across all its platforms. It also found in Veritas a technology partner that actively contributed to project success through timely advice, training, and ongoing support.



Data centers that flip like a switch

When the power goes out, every minute counts—and costs. That's why electricity transmission and distribution companies such as Oncor invest heavily in applications for outage prevention and management. But what happens when these and other critical business applications suffer disruption?

For Oncor, the largest transmission and distribution provider in Texas, if AMS applications are down and not meeting certain market-related service levels, Oncor is required to inform market participants of the outage. Recently, Texas state regulators raised the expectations on the level of performance and capabilities of the information systems that energy companies rely upon so heavily. As a result, Oncor was required to build a fully functional disaster recovery (DR) data center solution that could also leverage production data centers. Oncor must not only perform regular backups for DR purposes, but also fail over their entire environment from one site to another on a regular basis.



ORGANIZATION PROFILE

Site: www.oncor.com

Industry: Energy
(Electricity Transmission & Distribution)

Headquarters: Dallas, Texas

Employees: 3,700+

KEY CHALLENGES

Oncor® had a commitment to deliver disaster recovery for the State of Texas' Advanced Meter System (AMS) by the end of 2016. The solution needed to provide the ability to perform scheduled site switchovers as required in support of maintenance and other planned activities.

SOLUTION

The company deployed Veritas™ Resiliency Platform to achieve automated recovery for complex systems as well as alternating failover between production data centers.

BENEFITS

- Delivered on Oncor's commitment to continue providing a high level of service to the Texas market
- Reduced complexity with a single tool to manage resiliency and recovery for all relevant service-level objectives
- Minutes, rather than hours, to restore AMS to an operational state
- Proof of concept for expansion of resiliency program

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Jose Newman

Disaster Recovery Program Architect
Oncor

Since Oncor’s original AMS deployment, the technologies associated with the AMS platform have evolved significantly. The AMS platform is now highly automated and integrated with the Smart Meter Texas™ (SMT) Web portal, Energy Reliability Council of Texas (ERCOT), market participants, customers, and both Oncor’s Outage Management System (OMS) and internal business processes.

These technology components are diverse, complex multitiered applications that are hosted on a range of operating systems (both physical and virtual), storage technologies, and network and security components. The AMS platform has added complexity around specific startup and shutdown sequences, including stopping inbound and outbound data flows, and draining or instantiation of message queues. The complexity of the environment meant that the execution of the AMS platform startup and shutdown was taking longer than desired, with a significant number of resources in various areas of subject matter expertise.

Rather than juggle several recovery automation products to comply with the service-level objectives for the various applications, Oncor wanted a single, fully automated resiliency solution. This solution had to provide protection across Oncor’s production data centers, enabling AMS to operate in either, in order to minimize impacts to Texas market operations. The solution also needed the capability of integrating with multiple technology components, validating checkpoints, and providing a framework to convert “people processes” into software-driven processes. The preference was for a product to act as the “single lever to pull,” both for scheduled site switchovers supporting maintenance activities and takeovers during an unplanned event or disaster.

Compliance through cross-platform orchestration

Oncor Disaster Recovery Program Architect Jose Newman consulted with Veritas to find that comprehensive solution. After discussing various options, the DR team found the best fit with the newly released Veritas Resiliency Platform (VRP). “VRP was far more comprehensive and versatile than anything else we had evaluated,” Newman says.

Now Oncor is using VRP to comply with the new commitments by achieving single-click toggling of production workloads between its production data centers. VRP provides the fully automated features necessary to achieve this, including workload migration, failover, failback, data protection, and non-disruptive recovery testing.

“We leverage VRP as the core orchestrator to move application components of the AMS platform between data centers in support of maintenance activities,” Newman says. “In the case of a catastrophic failure or DR event, VRP is the single lever pulled to online mission-critical application platforms in alternative sites. In addition to AMS, we are encapsulating other mission-critical application platforms.”

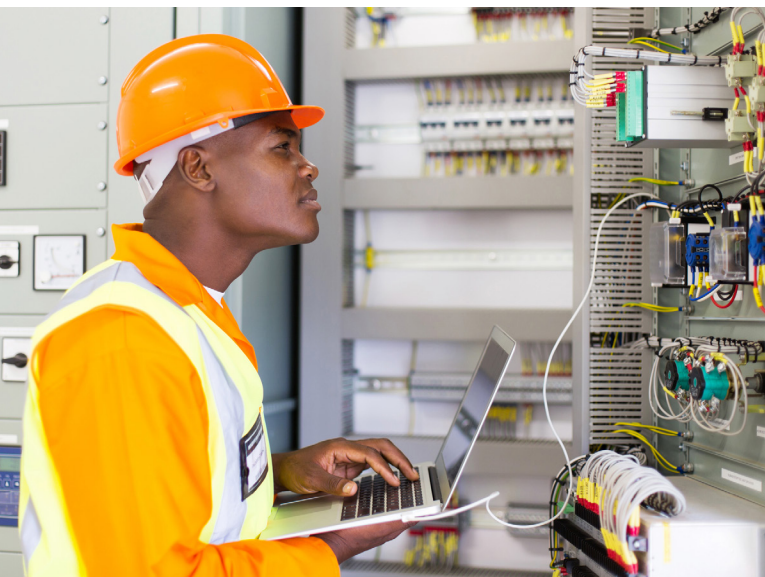
One of the primary benefits of VRP is the solution’s simplification of disaster recovery activities. “Our recovery scenarios are complex, but VRP simplified them,” Newman says. “And I was impressed that Veritas was able to provide the technology support we needed so quickly and smoothly.”

SOLUTIONS

- Veritas Resiliency Platform

SERVICES

- Veritas Consulting Services through the assess, design, and deploy stages
- Veritas Education Services VRP training
- Veritas Business Critical Services Premier with named Business Critical Engineer



“Our relationship with Veritas goes back more than a decade. They are very familiar with our operational and financial requirements and have demonstrated flexibility in meeting them.”

Joel Austin

Vice President & CIO
Oncor

Advice, education, and support are keys to success

In order to orchestrate the failover and recovery of Oncor’s business processes, the DR team needed to understand the inner workings, plus upstream and downstream dependencies among the various applications. This discovery effort was significant and involved several groups of subject-matter experts. “Veritas Consulting Services helped the teams identify and map our various application dependencies,” Newman says.

While the applications staff was ironing out those details, DR team members recognized the need for training. The Education Services Team administered a skills assessment of approximately 100 Oncor team members. The detailed reports enabled Education Services to customize training mapped to the defined skills gaps. As a result, Oncor teams participated in VRP training classes in both the U.S. and India, with additional skills assessments scheduled for completion.

Oncor has continued its relationship with Veritas Business Critical Services—Veritas’ mission-critical support offering. Additionally, Oncor extended its relationship with an assigned Business Critical Engineer (BCE), who has a deep understanding of Oncor’s staff, processes, and infrastructure. The BCE will help to optimize the environment and minimize downtime by identifying potential issues before they impact performance, as well as to ensure that product features are fully utilized so that Oncor can get the most value from their Veritas technologies.

Oncor Vice President & CIO Joel Austin is confident that Oncor has chosen the right partner to meet the regulatory mandate. “Our relationship with Veritas goes back more than a decade,” he says. “They are very familiar with our operational and financial requirements and have demonstrated the ability to meeting them.”

For more information

Please contact your local Veritas Sales Representative or Business Partner, or visit:

[Veritas Resiliency Platform](#)

[Veritas Professional Services](#)

Veritas World Headquarters

500 East Middlefield Road
Mountain View, CA 94043
+1 (650) 933 1000