

Last mile access diversity that maximizes availability

How an energy operator keeps its power grid up for millions of homes



When you're managing electricity to more than 20 million homes and businesses, availability is mission-critical.

So when this operator needed to eliminate downtime and improve redundancy, they turned to T-Mobile for Business to bring true access diversity to their network.

Challenge

For the operator, service continuity means more than uptime. Any interruption to the wireline connectivity at their 100+ sites (linking more than 40,000 miles of transmission lines and almost 700 generation plants) means customers lose access to essential utilities.

That's why their secondary network wasn't fit for purpose. It was based around point-to-point (P2P) connectivity to a major provider's legacy TDM infrastructure. And it was threatening uptime in two major ways.

First, it offered no flexibility to scale up as the organization's bandwidth requirements inevitably grew over time. But second—and more worryingly—their primary and secondary networks were sharing the same underlying access infrastructure.

That's why they wanted to work with a wireline provider with an intelligent approach to multi-layer network diversity, designed to provide maximum network availability—so they could support their primary connectivity with a backup connection that leveraged diverse access infrastructure to help guarantee 100% uptime.

Who

Major public utility company with 100+ sites that manage the flow of electric power for more than 20 million customers.

What

Bring more resiliency and uptime to single-access P2P backup network

How

Implemented MPLS and Ethernet with diverse, multi-provider access from T-Mobile for Business

Results

Diverse access options brought to 80% of sites for aggressive SLAs and minimized downtime

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Solution

The company had previously used MPLS, Ethernet and Managed Network Services from T-Mobile for Business for some of the most critical parts of their primary network.

So when it came time to select a new provider for their secondary network, they knew where to go for a close working relationship founded on availability, support and cost-effectiveness. They chose T-Mobile for Business to deliver backup connectivity through an MPLS and Ethernet network at the vast majority of their sites.

This didn't just provide much more headroom and flexibility around future bandwidth capacity compared to their TDM infrastructure, it also meant they were able to leverage T-Mobile's strategic network of Ethernet access providers to bring more access diversity, resilience and uptime guarantees through:

- Diverse access vendors at each site
- Diverse points-of-presence
- Diverse provider-edge (PE) and customer-edge (CE) routers
- Managed Network Services at all sites

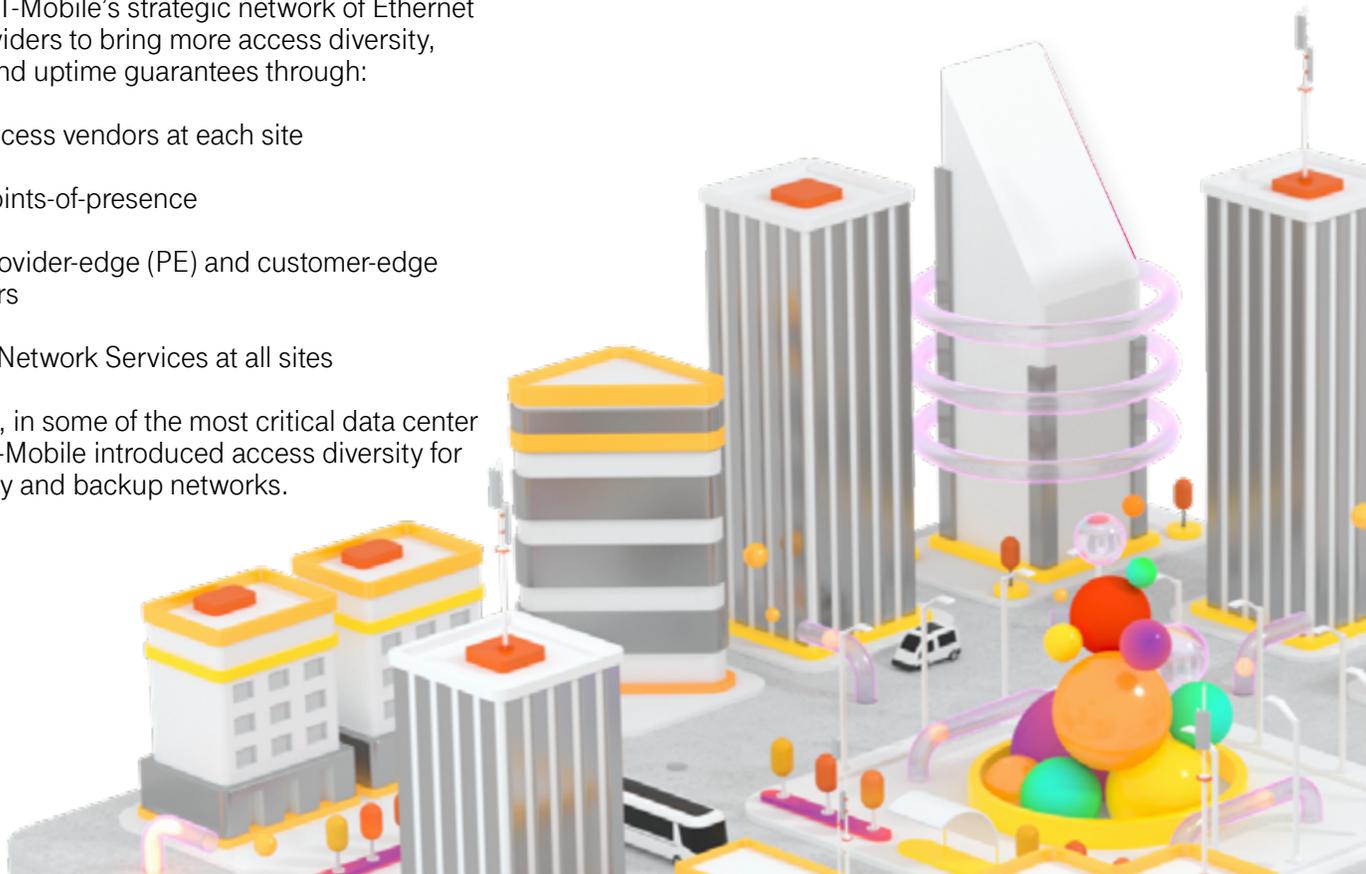
Additionally, in some of the most critical data center locations, T-Mobile introduced access diversity for both primary and backup networks.

Results

The vast majority of their network now leverages last mile access diversity. That means network uptime is maximized, which ultimately means zero interruption to the power grid they manage, and continuous services for their customers.

Overall, the company now benefits from:

- Increased resiliency, redundancy and uptime of backup network
- Aggressive, high-availability SLAs
- Flexibility to grow with future bandwidth needs through MPLS Ethernet



Let's talk

Find out what the CertaintySM design model can do for you.
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