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Case Study

NEC XON leverages tech it distributes as natural disaster backup

Overview

Maintaining uninterrupted internet connectivity is crucial for business operations, as demonstrated by NEC XON and other businesses in Midrand, South Africa, during a severe storm in February 2024. The storm caused extensive damage to critical infrastructure, disrupting communication channels for multiple organizations, including NEC XON. Despite having primary and backup fibre links, NEC XON faced connectivity issues, leading to a significant operational challenge.

The Threat

Natural disasters and infrastructure failures pose significant threats to business continuity, as witnessed during the severe storm in Midrand. The disruption caused by such events can result in prolonged downtime, impacting productivity, revenue streams, and overall business operations. Traditional communication channels, including fibre optics, are particularly vulnerable to disruptions caused by disasters like storms, which can lead to a cascading effect on various aspects of operations, such as customer service, supply chain management, and data processing.

Furthermore, reliance on terrestrial infrastructure exposes businesses to single points of failure, where a single event can cause widespread outages affecting multiple organizations simultaneously. In the case of NEC XON, the damage to a major fibre Point of Presence (PoP) left the organization without connectivity, despite having both primary and backup fibre links. The estimated repair time provided by service providers indicated a downtime of three days, posing a significant challenge to NEC XON's operations and productivity.

The Response

NEC XON swiftly deployed the OneWeb satellite solution, providing seamless connectivity for the entire office within an hour. As one of the early adopters of the technology in South Africa, NEC XON's technical team efficiently configured the satellite access, circumventing terrestrial communication infrastructure failures and maintaining uninterrupted operations.

The Benefits

Resilience and reliability: OneWeb's low earth orbit satellite network bypasses terrestrial infrastructure vulnerabilities, ensuring continuous connectivity even during natural disasters.

Improved latency: With latency reduced to under 100ms, NEC XON experienced enhanced performance suitable for various communication needs.

Cost savings: The implementation of the satellite backup mitigated potential revenue losses for NEC XON. Automatic cutover: Future plans include automatic switchover to the OneWeb solution in case of an outage, providing backup as a service.

Ease of implementation: NEC XON's experience highlighted the ease of deploying and configuring OneWeb satellite technology, enabling quick adoption.

The Conclusion

The case study of NEC XON exemplifies the importance of innovative solutions like Eutelsat OneWeb satellite technology in ensuring business continuity amidst infrastructure failures and natural disasters. As key industries like mining and agriculture rely heavily on real-time data and communication systems, uninterrupted connectivity is critical for productivity, safety, and efficiency. By embracing satellite backup solutions, businesses can mitigate risks, enhance resilience, and maintain seamless operations, regardless of external challenges.