

Golden West Benefits from netElastic's Distributed BNGs

Golden West, a rural telecommunications cooperative, has been serving South Dakota for over a century, providing voice, video, and broadband services to over 30,000 subscribers. Over the past two decades, Golden West has transformed from an all-copper DSL network to a fiber-first network. This initiative is bringing competitive internet speeds and service to residents in both urban and rural areas.

Centralized vs. Distributed Broadband Network Gateways (BNGs)

Golden West wanted to move from centralized Broadband Network Gateways (BNGs) to distributed to minimize the impact of failures, upgrades, and downtime by limiting the number of customers dependent on each BNG. By distributing the network POPs around the state, subscribers enjoy lower latency and a better overall network experience, since they are more likely to be located closer to a network access point. Anthony Gervasi, Manager of Platform Engineering at Golden West, said, "Distributed BNGs allow customer traffic to hit Layer 3 earlier, making redundancy and failover more reliable."

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- Anthony Gervasi, Golden West





Once Golden West made the strategic decision to transition to distributed BNGs, the next step was to develop criteria for selecting a BNG solution. "We chose a virtualized BNG to capitalize on the latest advancements in virtualization technology," said Gervasi, highlighting the company's progressive approach.

netElastic's Distributed Virtual BNG

After reviewing various BNG vendors, Golden West selected netElastic. "netElastic brought us all the advantages of a virtualized solution and their licensing models and pricing are attractive. We were better able to allocate bandwidth resources, use much less power, and the performance was comparable to traditional BNG solutions."

Early on, there concerns about shifting to a distributed BNG. "The main issue was managing more devices on the network. Fortunately, netElastic's vBNGs performed better than anticipated, allowing us to reduce the number needed. It also uses a familiar interface, so all our engineers could immediately and easily operate it."

Moving to Distributed BNGs – The Results

"As a company, we're very happy with how our strategy turned out. The netElastic vBNG platform has simplified our network by reducing the interface bottlenecks we previously experienced at our monolithic, aggregated BNG sites. We routinely had to move uplink connections to different ports on the old BNGs depending on bandwidth usage changes, resulting in downtime for our customers."

Gervasi concluded, "Overall, it's been a great experience. Once everything was set up, deployments have gone very smoothly. netElastic's vBNGs have been more stable and reliable than our previous solution, not to mention much more affordable."

If you'd like to learn more about netElastic's vBNG, visit us at netelastic.com.

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