Private Wireless for Cal Poly's Cutting-edge 5G Innovation Network

Delivering 5G connectivity to one of the nation's top masters-level research universities and a leader in digital transformation.

Federated Wireless and AWS partnered to build Cal Poly's 5G innovation network, which increases research capabilities, enhances bandwidth, and advances connectivity across the campus.

Challenge

Cal Poly needed a network powerful enough to support its Digital Transformation Hub (DxHub) and the launch of its 5G innovation network. The network needed to be able to support numerous different requirements and user groups. The new network was to become the backbone of Cal Poly's smart campus, accelerating the adoption of cloud, edge, and IoT.

Solution

Federated designed and deployed a secure, private wireless network that allows Cal Poly to leverage the cloud-based advantages of shared spectrum-enabled CBRS 5G connectivity. The network's unique multi-tenancy capabilities ensure the solution can partition private network resources for various requirements and user groups.

Built on AWS Snowcone and connected over Federated shared spectrum deployed on AWS, the private 5G solution delivers secure, reliable connectivity in highly remote environments where last-mile connectivity was the greatest barrier to deploying new applications and devices.

Impact

5G — **Enable smart infrastructure for:**

- **Increased research capabilities**
- **Enhanced bandwidth + connectivity**
- **Lower latencies, faster speeds, better coverage**
- **Training students on 5G**
- **Successful deployment in a matter of weeks combining edge services on AWS and Federated Wireless managed services.**