

Education Case Study



BEEKMANTOWN
Central School District

Client Background

- One of the top technically innovative school districts in upstate New York
- Facilities with multiple locations on campus
- One single provider
- Department of 21st Century Learning administers and assures performance of all district computers, data and VoIP network equipment, and security systems.



Pain Points

- No internet back up or redundancy
- No Wide Area Network
- Phone system managed by non-local 3rd party
- Insufficient bandwidth
- Limited support

Solution ✓

Westelcom designed a campus-wide solution delivering SD-WAN, Data Connectivity, Voice, Unified Communications, and Security services on a solid, reliable network with mission-critical support.

Beekmantown CSD Service Topology



SOLID INTERNET CONNECTION WITH REDUNDANCY

Westelcom provides voice with redundancy in place through another ISP. If Westelcom services go down, the other ISP circuit will become the primary and communication between the sites stays up. This can be from the result of a fiber cut, power outage, or loss of service in our core.



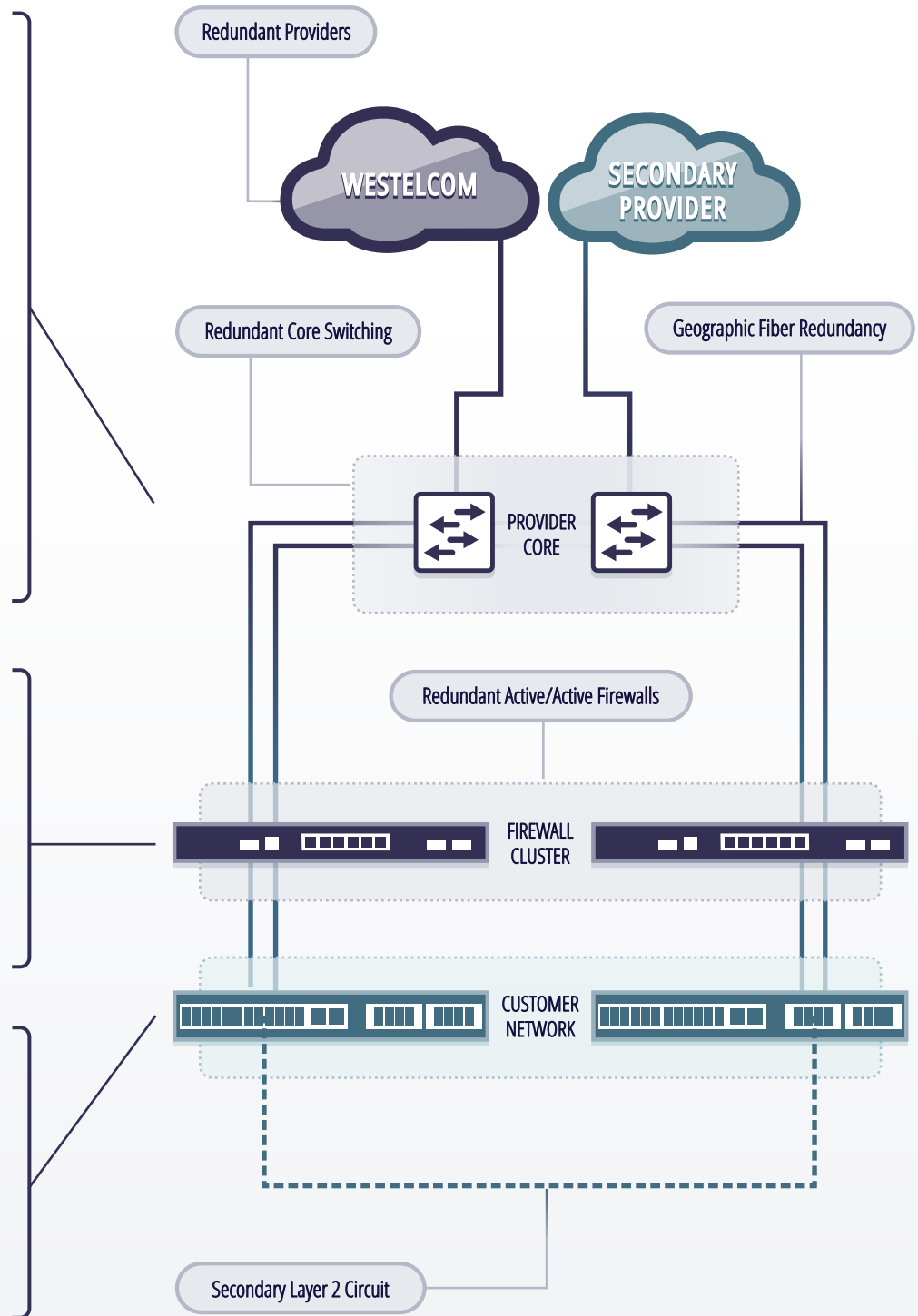
A LAYER OF SECURITY

The firewall cluster provides security for voice. Some more advance features can be enabled upon request.



WIDE AREA NETWORK

Westelcom dropped in fiber optic cabling to interconnect facilities and tie them all together creating a campus network.



Services We Depend On

INTERNET CONNECTIVITY

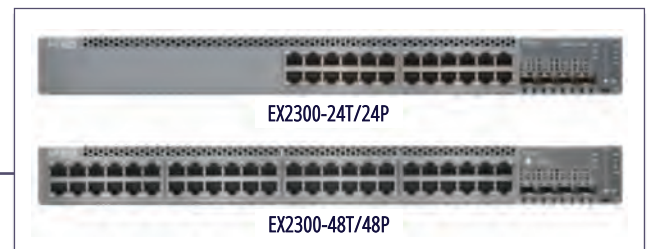
- PCs, Laptops, Phones, Tablets, etc., require internet for day to day operations and what's more important is reliability to reach the internet
- Juniper's SRX series firewall with multi-WAN and EX series switches ensure physical LAN connectivity
- Juniper Mist Wireless paired with the SRX and EX provide an SD-WAN solution for wireless devices

Juniper SRX Branch Firewall

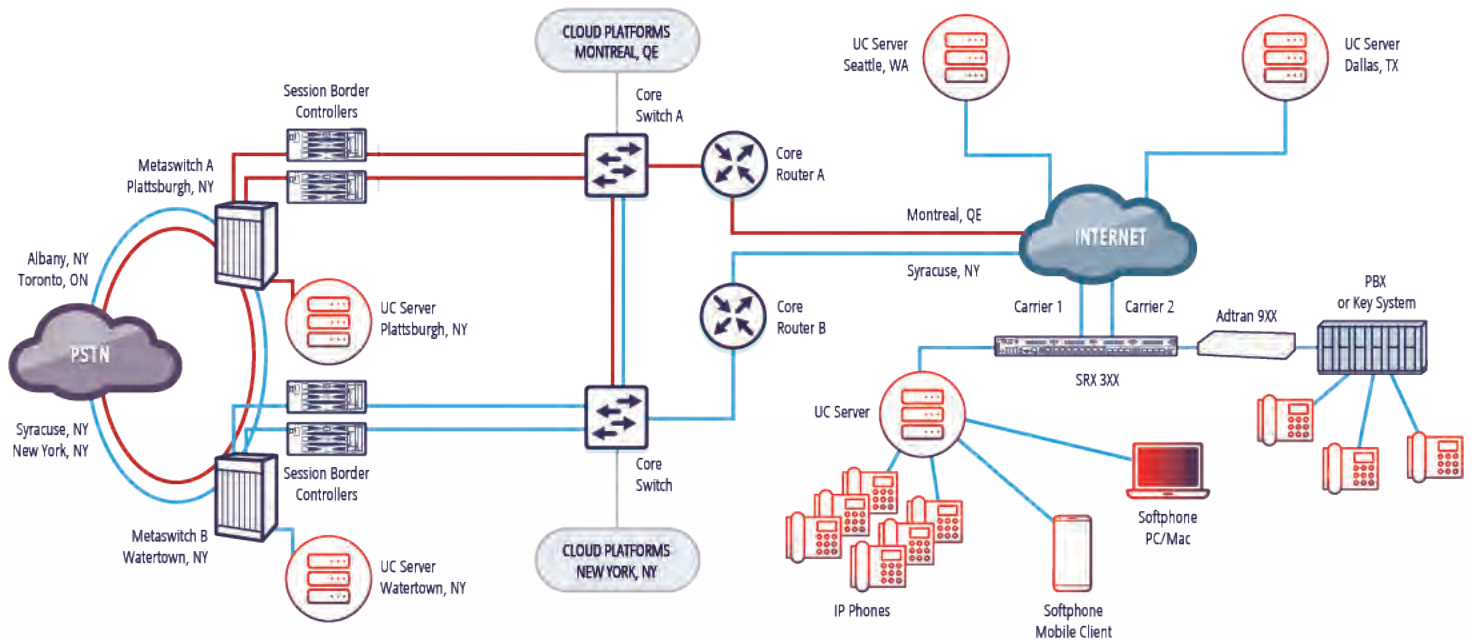
- Multi-WAN support for Internet and 4G LTE
- VPN tunnels with AES-256 encryption
- Application monitoring
- Zone-based firewall for isolation and security
- 1 RU form factor
- RJ45 and SFP interfaces

Juniper EX Series Switch

- PoE/PoE+ up to 30W
- 12/24/48 Gigabit port options
- LLDP and LLDP-MED support



Phone System / Voice Application

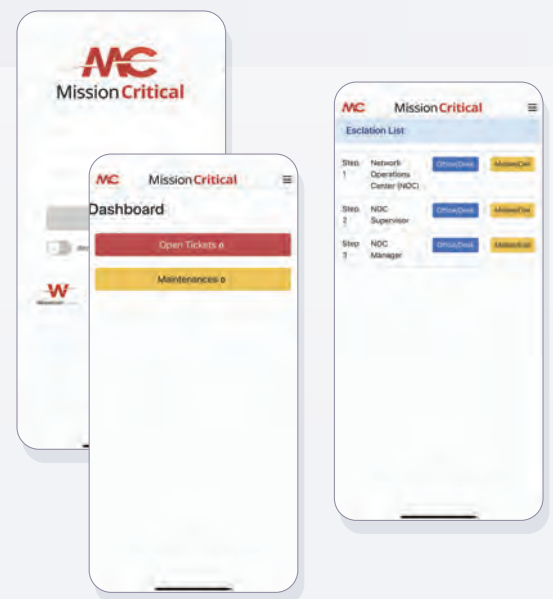


BCS has a Hosted PBX phone system that is handled through our Metaswitch with redundancy in place between Plattsburgh and Watertown in conjunction with their network design. The Unified Communication app is included which allows employees to use their cellphone as extensions of their deskphones.

Mission Critical Support

Our premier mission critical notification app, originally developed for the hospitals and medical facilities, is now available for use in your organization by request. Westelcom’s Mission Critical App lets you:

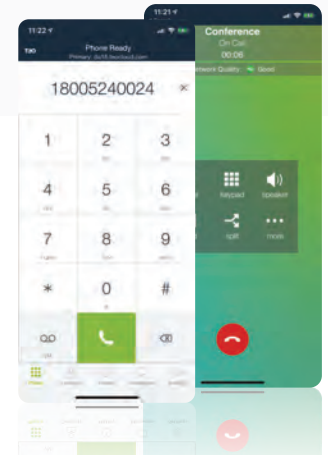
- Create support requests
- Receive mission critical notifications
- Monitor ticket activity
- Manage push notifications
- Monitor network up-time
- Review network maintenance updates
- Request service changes
- View Statistics and reports (usage utilization, traffic analysis)
- And more—we are continually enhancing and adding features!



Services We Depend On

VOICE AND COMMUNICATIONS

- Voice still plays a large role in business operations for employees and their clients
- Teo's UC softphone provides connectivity over the internet. Calls can be placed from a PC or smartphone from anywhere internet connectivity is available
- Teo's UC provides teleconferencing for video calls, either one-on-one or meetings



TEO UNIFIED COMMUNICATIONS

- Voice
- Presence
- Email Integration
- Voicemail & Voicemail to Email
- Presence-based call routing
- Conferencing
- Instant Messaging
- Schedule-based call routing
- Video
- Mobility
- Integrated Fax
- API Integration



We craft it all, so it works well together...

- System Software - Our UC solution is built from the ground up for UC, with single code base for premise and cloud deployments. This means only Teo can deliver cloud+ deployments for total peace of mind
- Hardware - We design and manufacture our solutions from end to end, including system hardware and desk phones.
- Desk Phones - Teo has been making desk phones since 1972, and that contributes to making phones that are easy to use, reliable, and will last for years to come.

VoIP Phones

- Can be installed in a home office location, provided access to a router with an Ethernet port and high-speed internet connection are available.
- Installation of a home phone will require the phone to be powered with a power supply or PoE switch, and an Ethernet connection from the phone to the router.

PC/Mac Softphones

- Make and receive voice calls using your office phone number on your Windows PC or Mac .
- Enjoy HD video calls with the ability to video conference with up to four other extensions Publish your own presence status and know the presence status of anyone in the organization in real-time.
- Can be operated with USB or Bluetooth headset, or with audio/microphone/video capabilities built into your PC or Mac

Mobile Softphone

- Make and receive calls using your office phone number from any smartphone.
- Our Mobile Softphone empowers the mobile workforce with voice and HD video.
- Publish your own presence status and see status of anyone in the organization in real-time. Peer-to-peer messaging other Teo UC users.