Network In A Box

Ribbon's Solution for Rapid Disaster Recovery



Delivering Network Resiliency During Recovery From Natural Disasters

The frequency and severity of disaster situations are on the rise, largely because of climate change. As extreme weather events become more frequent and intense, communities around the world are facing unprecedented challenges in responding to and recovering from disasters.

Who Can Benefit From This Solution

Communications & Internet Service Providers, & Critical Infrastructure Providers such as Utilities, Oil & Gas, Transportation & Defense.

Communications & Critical Infrastructure Providers play a crucial role in maintaining the stability and security of voice and data communications and critical infrastructure throughout their communities. In the event of a natural disaster or an attack, providers' existing communication infrastructure may become damaged or disrupted and as a result, providers require a rapid response communications solution that can be quickly deployed to ensure continuous connectivity to support efficient coordination of resources during disaster recovery.



This solution must meet the following requirements:

- Prepackaged to allow for swift deployment in the field with minimal installation requirements
- Offer connectivity options such as fiber, satellite, and wireless to ensure reliable connectivity even in remote or difficult-to-access areas
- Tailorable and off-the-shelf options to provide secured voice and data communications, as required

With this kind of versatile and efficient communication system in place, providers can effectively carry out their vital operations during times of crisis.

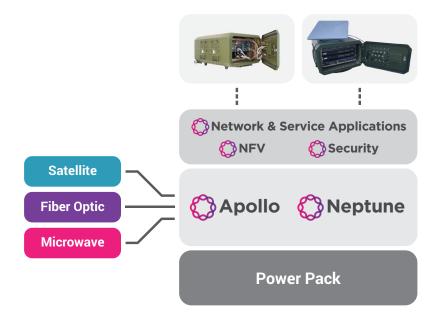
For communications & critical infrastructure provider executives, it is crucial to be concerned about how your company responds to disasters. The ability to restore service to the community as quickly as possible not only reflects positively on the company's reputation and brand image, but also plays a critical role in supporting first responders who are rescuing those injured in the disaster. Therefore, it is essential for providers to prioritize disaster response preparedness.

For communications & critical infrastructure provider technical primes, the solution to restore service must also consider interoperability with existing infrastructure. It is imperative that this solution be readily available for deployment immediately once a disaster strikes. Additionally, it should require minimal effort in terms of setup and configuration. Keeping all these factors in mind while selecting a disaster response solution can ensure that technical primes are well-equipped to handle any emergency efficiently and effectively.



Application Note

Communications & critical infrastructure providers cannot afford to wait for a disaster to occur to test their readiness to respond. To ensure that they are truly prepared, they require a solution that has been battle-hardened and can be tested ahead of time. This is not just a matter of business decision-making, but also a technical one. It is crucial for the provider to have confidence in their ability to respond effectively when faced with a crisis. Therefore, having a solution that has been thoroughly tested and proven effective in simulations can give them the assurance they need. This not only saves valuable time during an actual emergency, but also ensures the safety and security of people and assets.



Example of Ribbon's Network in a Box Communications Solution

Ribbon's Network in a Box Communications Solutions

Ribbon's Network in a Box Communications Solutions, provides innovative answers to address the challenges faced by providers during emergency situations. The solution involves packaging secure voice, IP optical transport and wireless communication network elements in a hardened enclosure for rapid response in disaster scenarios. The solution also includes dedicated batteries and power systems to ensure continuous operation, even in irregular power conditions or blackouts. Furthermore, users have the flexibility to restore connectivity through various options including fiber, wireless, microwave or LEO satellite.

Solution Attributes:

- Casing: Lightweight, aluminum case
- Packaging: available in multiple options: trolleys/trailers, 4U, 6U, 10U sizing
- Connectors: Optional military grade (optical & electrical)
- Security: equipment can operate with locked doors
- Power: Customized PDUs
- Environmental & Mechanical:
 - Integrated Shock Absorbers
 - Cooling Fans
 - In case lighting
 - Field Replaceable Filters



Ribbon's Network in a Box Communications Solutions can be procured in either off-the-shelf or customized versions to meet specific customer requirements. Its' rapid deployability and secured communications platform with converged multi-access backhaul connectivity make it an asset for emergency situations while zero-touch deployment enables system setup without requiring network connectivity while maintaining local-site independence in case of network blockage or malfunctioning. Recognizing that one size doesn't fit all, this solution has been customized for various customers globally, with multiple different designs developed to cater for the specific needs and requirements of different network operator types, geographies, and terrains.

An example of the successful implementation of the "Ribbon's Network in a Box Communications" solution was used by military first-responders during a magnitude 7.8 earthquake that struck southern and central Turkey on February 6, 2023. This solution was used to support communication among first responders, providing them with the necessary tools to efficiently coordinate their operations. The system provided seamless connectivity, allowing quick deployment and real-time information sharing amongst teams.



Ribbon offers a leading option for disaster recovery due to its unique features and capabilities. With its highly redundant architecture, Ribbon ensures continuous connectivity even in the event of failure. An extensive network slicing scheme enables mission critical services to run smoothly even over narrowband links, ensuring communications are delivered during recovery from disaster situations. Additionally, Ribbon offers multiple access connectivity options such as fiber, microwave, wireless, or LEO satellite, providing flexibility and reliability for different network environments. The inclusion of a cyber security suite enhances data protection and privacy. Ribbon also stands out for its customization options - RRC designs can be tailored to meet specific customer needs with dedicated teams providing professional solutions promptly.

With multiple customers across the globe benefiting from Ribbon's Network in a Box designs, it is a reliable and proven choice for network recovery in disaster situations.



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