

BROCHURE

4 Reasons ISPs are Shifting to Open Networking

ISPs are facing significant challenges expanding their networks, particularly smaller ones in rural areas backed by the RDOF and BEAD programs. Your ISP can now benefit from the same technology that tier 1 carriers like AT&T and Verizon have already been utilizing for years. Below are some common reasons why many ISPs move from the monolithic traditional networking approach to a modern Open Networking model to help mitigate some of these challenges.

01 Lower TCO

Traditional networking equipment is expensive, and the cost of maintaining and upgrading the equipment can add up over time. By adopting an open networking model, organizations may be able to reduce CapEx and OpEx by using less expensive white box hardware and software from disparate vendors without sacrificing functionality or performance.

02 Better Hardware Availability

Ongoing component shortages have significantly impacted the production and delivery of many products, with traditional networking products being particularly affected. With lead times of up to a year or longer for traditional platforms, organizations are turning to white box platform vendors with off-the-shelf merchant silicon, which oftentimes have better availability.

03 More Flexibility & Control

Open networking gives organizations more control over their networks, as they are not locked into a single vendor's proprietary hardware, software, and component solution. Proprietary networking solutions can limit an organization's ability to customize its network to its unique needs, which can reduce its competitive edge.

04 Faster Innovation

Disaggregated networking is a new approach to networking that allows organizations to independently upgrade or replace hardware and software components. This enables them to take advantage of new technologies and innovations without replacing their entire network infrastructure, protecting their network investment against technological obsolescence for years.

Addressing Open Networking Challenges & Misconceptions

Open networking offers significant benefits, but it can be more challenging to implement than traditional deployments without proper guidance. Some challenges are based on misconceptions, while others are real and should be carefully considered. That's why we recommend partnering with our team of multi-vendor experts, who have real-world experience implementing open networking solutions since 2018 for data center operators, service providers, and enterprise clients. We can help you navigate the complexities of open networking and avoid the pitfalls. We will work with you to develop a roadmap that meets your specific needs and ensure a successful business-aligned open networking deployment. Below are some common concerns when considering moving to a disaggregated networking model:

01 Complexity

Open networking is often perceived as more complex to deploy and manage than traditional networking solutions. This is because open networking is disaggregated by design, allowing you to procure hardware, software, and components separately. While this disaggregation gives you the freedom to choose only what you need, it also adds the challenge of integrating disparate solutions. To address this challenge, vendors now offer bundled open networking solutions. However, customers often ask which approach is best for them: bundled or disaggregated? The answer is that it depends on your specific needs. In most cases, a bundled turnkey solution is the best option because it offers both the freedom of choice and a solution that is pre-packaged and ready to be deployed.

02 Fragmentation

Vendor fragmentation is sometimes seen as a challenge for the adoption of disaggregated networking because it relies on a mix of different vendors for network hardware, software, and components. However, hardware vendors such as Edge-Core, Ufispac, Tibit, and others are now working closely together with NOS vendors like IP Infusion and Exaware, offering full-stack bundles that include hardware, software, and support. These leading vendors partner with system integrators like Hardware Nation that provide multi-vendor support, and help deliver a turnkey solution that is easy to deploy and manage.

03 Interoperability

Adopting open networking solutions can be a complex and demanding process, especially when migrating from an existing traditional network environment. This transition period can impact network performance and availability. Our team has years of open networking experience and deep expertise in service provider networking, and we ensure a successful deployment by working with a select group of vendors that have a proven track record of delivering mature, field-hardened interoperable solutions. We also perform interoperability testing in our lab and in real-world pilot projects with our customers to validate the design and functionality of the proposed solution prior to full-scale deployments.

04 Support & Warranty

One of the most common questions when a customer is considering an open networking model is about warranty and support. We understand this concern, as you need to be confident that you will receive timely and competent support should you experience an issue with your mission-critical infrastructure. The open networking industry has matured, and vendors now offer the same world-class level of support as traditional vendors, with a variety of options to meet your unique needs.

Challenges Unique to ISPs

ISPs are facing significant challenges in expanding its networks due to the impact of inflation on rural build plans, particularly those backed by the Rural Digital Opportunity Fund (RDOF) and Broadband Equity, Access, and Deployment (BEAD) Program. Rising labor, materials, and fuel costs have caused build estimates to skyrocket, making it increasingly difficult for operators to secure project financing. This has led to concerns about defaults on their obligations, with some industry insiders calling for the U.S. government to extend broadband loan programs to assist RDOF winners. One way that ISPs have been able to mitigate some of these challenges is by adopting an open networking model, which can significantly cut costs without compromising the quality and features provided by traditional networking vendors, enabling ISPs to build more cost-effective and flexible networks.

Why Hardware Nation for Open Networking?

Network disaggregation can be transformative for your organization. It can significantly reduce TCO, give you the freedom to choose hardware vendors to improve lead times, and has the same carrier-grade robustness and world-class support as traditional vendors. However, to fully realize the value of disaggregated networking, you need a trusted partner with experience. Our team of experts provides unbiased guidance and helps determine if open networking is right for your organization's unique needs. With years of experience deploying these solutions and strong partnerships with leading open networking vendors, we guide you through every stage of the journey, from initial discovery to consultation, roadmap creation, adoption, implementation, and ongoing support. Our experts help you navigate the ecosystem and ensure your network is secure, reliable, and optimized for cost and performance. Our experience spans a range of industries and use cases, including service providers, data center operators, and enterprise clients.

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