

Beating the Supply Chain Crisis

How MetaLINK Leveraged Whitebox to Reach Their Goals in Record Time









MetaLINK Technologies is one of the Top 20 Independent ISPs in North America, operating in Northwest Ohio, Northeast Indiana, and Southern Michigan since 1996 providing High-Speed Internet, Fiber Transport, Co-location, Web Hosting, and Hosted Phone Services and systems to businesses and households.

Overview

The global pandemic has brought to light the importance of reliable, fast broadband access. With people increasingly relying on online services for work, school, and entertainment, businesses have had to undergo a digital transformation, often in record time.

Despite the explosion in demand, governments and Service Providers are struggling to keep up as global supply chains continue to feel the squeeze and budgetary constraints prevail. MetaLINK is one such ISP. Their full service footprint covers a wide area, and their business grew 400% within the first 2 months of lockdown as their customers began working from home, streaming services, and accessing vital services such as education, banking and telemedicine online. In a very short timeframe and during a supply chain crisis, they needed to:

- Get a larger upstream connection to the Internet for their clients
- Find a cost-effective solution that was readily available
- All while ensuring reliable performance and service uptime.

After attempting to secure solutions from legacy vendors and being quoted 12 - 24 month lead times, MetaLINK eventually approached IP ArchiTechs.

IP Architechs

IP ArchiTechs Managed Services is an independent network consulting firm that specializes in Disaggregated Solutions and open networking integration. They work in ISP (wireless and wireline), Data Center and Enterprise environments and leverage cost-effective network vendors and solutions to maximize return on investment for clients without compromising scalability or availability. They do not sell hardware or software, instead focusing on their customers' business objectives and goals and partnering them with best-in-class suppliers. Having worked with EPS Global on customer engagements before, IP ArchiTechs recommended us to MetaLINK. Together we proposed an open networking solution for MetaLINK.

"We understood what services MetaLINK needed to deliver and their tight timeline to get the capacity upgrade. We looked to EPS because they have done a great job to date of delivering solutions to meet our customers' requirements across the globe".

Vince Schuele, Senior Network Architect - IP ArchiTechs



MetaLINK Deployment Map



Beating the Supply Chain Crisis



The Solution

The Disaggregated, or Open Networking solution quickly proved to be the solution that MetaLINK was looking for, as it was cheaper and more flexible than those from legacy vendors. The software that runs on whitebox switches is more capable, easy to configure and support, and can handle complex protocols such as BGP and MPLS which MetaLINK needed, along with delivering Layer-2 VPN.

IP Infusion & Edgecore from EPS Global

Feature-rich OcNOS from IP Infusion could satisfy these requirements. To increase their transport links between their core sites, MetaLINK used an IP Infusion-powered Edgecore AS5916 switch. With this, MetaLINK was able to upgrade their connections from 10GbE DWDM circuits to 100G links, and also provide 48x 10G services. EPS Global had the whitebox switches from Edgecore Networks in stock, and they managed the installation and configuration of the OcNOS software.

"We were hearing lead times and delivery times from legacy vendors anywhere from a year to all the way up to 2 years. The open networking solution from EPS Global solved the lead time issue. It took 3 months to deploy this network from start to finish."

Jeff Hummel, Technical Services Supervisor MetaLINK



Edgecore AS5916 switch



IP Infusion OcNOS

The Result: Flexibility, Scalability & Superior Support

Thanks to the flexibility and scalability of the open networking solution, what would have taken 12-18 months to complete with a legacy vendor was completed in just three months. MetaLINK was also able to save on costs – with the flexibility of disaggregated solutions and the lowered license costs, MetaLINK was able to stay on budget while achieving their goals.

"The licensing is a different scope than what you would expect from the larger providers which was a pleasant surprise. I also love the flexibility of everything that we're able to accomplish with this. IP Infusion's support has been a lot easier to engage with compared to some of the legacy vendors we've worked with before."

Jeff Hummel, Technical Services Supervisor MetaLINK



 ${\sf MetaLINK} \ and \ {\sf IP} \ {\sf ArchiTechs} \ {\sf featured} \ on \ the \ {\sf EPS} \ {\sf Global} \ {\sf Podcast}$

Most importantly, they were able to fulfill the 4x spike in demand for connectivity from their customer base reliably and in record time. MetaLINK now also has the capacity to scale up to 200G or 400G in the future when they need that next bump in performance.

"There is so much flexibility with the IP Infusion software we're running, it's the same software running across 3 different switch models from 2 different manufacturers. With the old solution building out our ring would have been a massive amount of work. In this case it was add in a switch and we had it online and in 15 minutes. It was just a matter of programming it, powering it on, and testing it. It's quite the time saver to just drop another switch in somewhere, route it into the same network, and away you go."

Nathan Gerencser, Senior Network Engineer MetaLINK

Conclusion

The experience that MetaLINK had provides insight for other ISPs facing similar issues – look into Open Networking as an affordable and reliable solution for businesses who need to rapidly expand their network, but don't have the time – or budget – to wait for solutions from legacy vendors.

"Not everybody has the problems or needs as the Tier-1s. The set of equipment that's geared towards the Tier-1s looks very different than what is a very valid and robust solution for Tier-2s and regional ISPs.

Being able to still deliver that same Qualityof-Service but using disaggregated solutions where there's more hardware availability means you don't have to wait 18 months to deliver bandwidth, you can do it in 3-4 weeks."

Vince Schuele, Senior Network Architect IP ArchiTechs

With the help of partners like EPS Global, who specialize in disaggregated solutions, ISPs can upgrade their networks with hardware and software that is available, less costly and quickly achieve their business goals.

About Us

Open Networking solutions are based on open standard, bare-metal hardware with a choice of open software for Software-Defined Networking, virtualization, and cloud orchestration. It was first adopted by hyperscalers to avail of the centralized network management, CapEx and OpEx savings, but mainstream adoption is accelerating as customer motivations are stronger and the barriers to entry are lower.

EPS Global sits at the center of the open networking ecosystem, bringing together the hardware and open NOS software to provide turnkey solutions for any use case, delivering value and expertise to your business. Our engineers can advise you on the best product set to suit your business needs, offering software configuration and bundling of solutions for hassle-free, consolidated shipments.

We have local language and currency support in each of our 28 locations, and we provide stock availability from our regional distribution hubs worldwide, minimizing lead times.

Contact EPS Global		Get in Touch Regional Headquarters	
\bowtie	serviceprovider@epsglobal.com	EMEA	+353 (0) 1 8038918
#	www.epsglobal.com	DACH	+49 6151 5012454
in	www.linkedin.com/company/epsglobal1	USA	+1 317 222 6334
•	www.voutube.com/c/epsglobal	Asia	+86 512 67617757