An intentional optics strategy for hybrid work

Discussing the future of work used to be an urgency-free exercise for most organizations. But the pandemic changed everything. The future of work suddenly became...well...work.

Overnight, every organization was forced to launch a hybrid workforce and needed a network equipped to support it. Most companies succeeded admirably. Despite the influx of devices accessing the network, increasing data traffic volumes, growing connections to cloud applications, and rapid adoption of video conferencing, hybrid workforces were powered by networks set up to weather the pandemic.

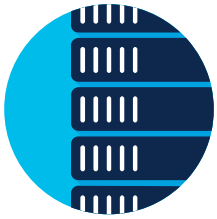
But what many of us assumed would be a temporary adjustment turned out to be more permanent. In fact, 86% of global CIOs and IT Decision makers agree it is important to empower a distributed workforce with seamless access to applications and high-quality collaborative experiences (Cisco, Accelerating Digital Agility 2021). This shift marks the beginning of a new era, where hybrid work becomes more than just connecting remote workforces. It becomes about connecting hybrid workers to the network and to collaborative spaces, along with access to connected sensors, monitors, robots, and more.

Now that hybrid work is here to stay, many organizations are planning for what's next. Some are beginning to feel the strain of their existing 1G or 10G network connection's ability to keep up with growing bandwidth demands. Others are well-equipped for now but are facing challenges managing the space in their data centers for connecting higher bandwidth equipment. All are looking to protect their existing campus network fiber infrastructure investments, even as they think ahead to a future of 100G and 400G connections.

While predicting future growth and change is challenging, preparing for it doesn't need to be. With an intentional optics strategy designed to increase your agility, you will be able to scale your network connections at the speed of your organization.

Benefiting from an intentional optics strategy

Your optics strategy is critical to providing the flexibility to deliver network speed and capacity while minimizing network operation costs.



Quality as high as expectations

Hybrid work expectations for connectivity will soon surpass your port connectivity. By 2025, 60% of all server ports are expected to be above 10 Gbps, and 60% of all switch ports will be 100Gbps or higher (Dell'oro Worldwide Ethernet Market Forecast July 2021). Upgrading to Cisco Single Lambda 100G optics, you can maximize the utilization of QSFP28 ports for both downlink and uplink connections. You will be ready to support connected experiences from traffic bound for on-premises datacenters, co-located datacenters, and cloud-based services.

Optimize instead of overhaul

Physical campus fiber infrastructure tends to be in place for 10 years or more. Instead of overhauling your fiber network, leverage the technology you already own by optimizing your current setup. Cisco Bi-directional transceivers and breakout cables will allow you to connect from your 10G/40G server ports to higher speed 100G/400G ports on your switches while re-using existing fiber infrastructure.

400G on your schedule

Your campus network may not need 400G right now, but it will. Investing in Cisco Single Lambda 100G today ensures that you are 400G ready tomorrow. If you operate your network using gear with 100G QSFP28 ports, you can upgrade just one site to 400G gear and still connect it to the existing 100G sites without sacrificing port bandwidth. This minimizes your downtime and allows you to upgrade the other sites when ready.

Simplify operations

Your cable infrastructure can be messy to manage and upgrade. Benefit from the increased manageability of fiber cabling vs. traditional copper while optimizing the rack space in your data center with fiber optics that permit more flexible connection options between servers and switches. For instance, with QSPF28 100G-DR pluggable optics you can connect servers and switches up to 500m apart. This means you have more flexibility to locate the servers and switches in your rack and optimize cabling, power, and cooling. Thus, simplifying overall operations.

Cisco can bring you up to speed

If there's one thing your network needs to ensure successful hybrid work experiences, it's Cisco Optics. Optical transceivers connect everything. And as a network equipment manufacturer, we understand how optics work in your architecture—connecting servers, switches, and routers across campus, data center, and transport networks. So, no one knows how optics work in your network better than Cisco.

Cisco Optics delivers the most comprehensive portfolio of future-ready optical transceivers to provide the increased capacity, reach, and speed for your network connections. Backed by extensive testing, qualification, validation, and customer support, Cisco Optics ensures peace of mind at the heart of your network.

Learn more

To better understand how Cisco's optical transceivers can help you transition to higher speed network connectivity, and the impact on network infrastructure design. We invite you to read our white paper.

We also invite you to contact your Cisco account team. They're ready to help you optimize your network and ensure your hybrid work environment is 400G ready, whether that need is immediate or earmarked for a future time.