



Lightpath

LP FlexNet Whitepaper



**Complex
Networks
Need Simple
Management**



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Today's successful organizations need more secure connectivity between more devices, more Clouds, and more locations

Digital transformation, the adoption of Cloud and SaaS services, and the trend toward hybrid work have changed IT architectures dramatically. It has also increased the risk of cyber-attack at a time when cybercrime is becoming more sophisticated and frequent. With IT budgets tightening and the global shortage of skilled network and security professionals, managing a network to meet ever-changing requirements and protect against cyber threats has become more challenging than ever.

The good news is that these challenges can be navigated with confidence when choosing LP FlexNet, Lightpath's Software-Defined Wide-Area Network (SD-WAN). As a 100% Cloud-managed solution, the user-friendly web portal enables the configuration of network connectivity and security policies with just a few clicks. Whether you have one site or hundreds, with LP FlexNet monitoring the health of your network and applications, identifying and troubleshooting problems has never been easier.

LP FlexNet securely connects your sites and users, wherever they are working (in the office, from home, or on the road), to your applications, no matter where they are (in your Data Center, on the Internet, or in a Public or Private Cloud). With LP FlexNet's advanced traffic management and security features, performance is optimal, and your sites, users, and applications are protected from cyber-attack.

LP FlexNet's Zero Touch Provisioning simplifies the deployment of the LP FlexNet routers, and software updates are completely automatic. Reports on network usage and security are generated and emailed to you automatically. Templates enable configuration changes of all the routers in your network with a single click. Standards-based interfaces and APIs are available to integrate the LP FlexNet network into your IT environment simply and efficiently. So, whether you're looking for a relatively small WAN with a few locations, or a large WAN with thousands of locations, LP FlexNet can meet your requirements.

Thanks to LP FlexNet, you can have enterprise-grade networking and security at an affordable cost. The job of providing secure, reliable, and performant connectivity to your sites, users, and applications is greatly simplified, freeing you up to focus on other mission-critical tasks.

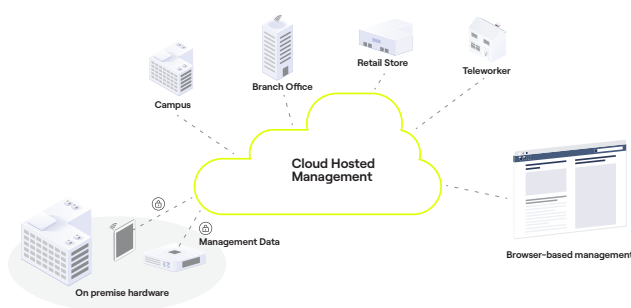
Implement and manage with ease

As a managed service, Lightpath will gather your requirements, document them, and then create a solution to meet your needs, even integrating with your existing infrastructure as required. Next, we'll test and install LP FlexNet at a time convenient for you.

Through LP FlexNet's intuitive browser-based dashboard, we easily manage, configure, control, and monitor the health, performance, and security of your WAN. The Dashboard will indicate the connectivity and security of your users, sites, and applications and can be reconfigured as needed. Templates are available to automate deployment and configuration and to enable mass changes.

The LP FlexNet Dashboard enables the configuration of the network architecture to align with your needs, whether full mesh, hub-and-spoke, or hybrid. If you have applications running in the Cloud, we can quickly extend your WAN to the Cloud.

LP FlexNet Cloud Management Architecture

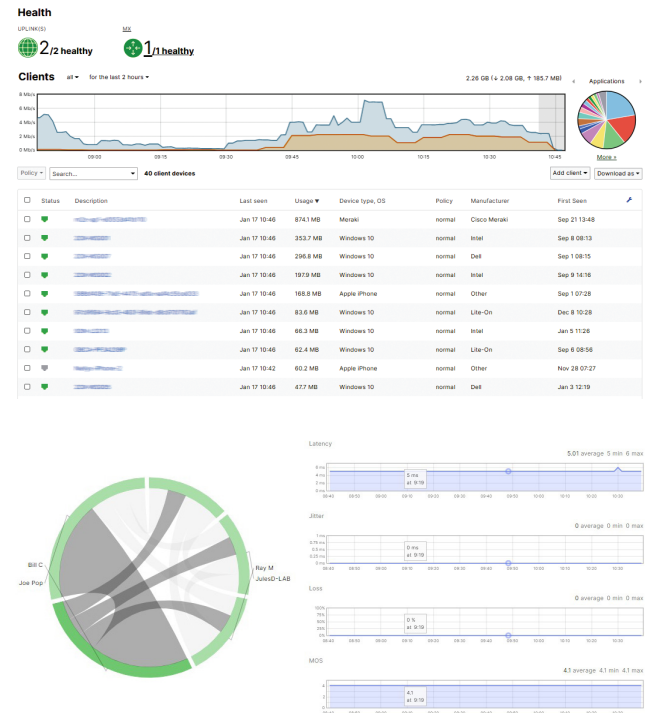


Monitor network and application health, performance, and security

The LP FlexNet Cloud-based portal provides centralized visibility and control across your entire network. The health of your network and critical applications are easily monitored, and you will be informed of any cyber-attacks that are detected and/or blocked.

- Monitor the health of critical applications (e.g., Office365, Salesforce, or Webex)
- Monitor the health of your WAN, including loss, latency, and jitter
- Real-time and historic network statistics monitoring, per application, per user
- Reports on cyber-attacks that are detected and/or blocked

LP FlexNet Visibility

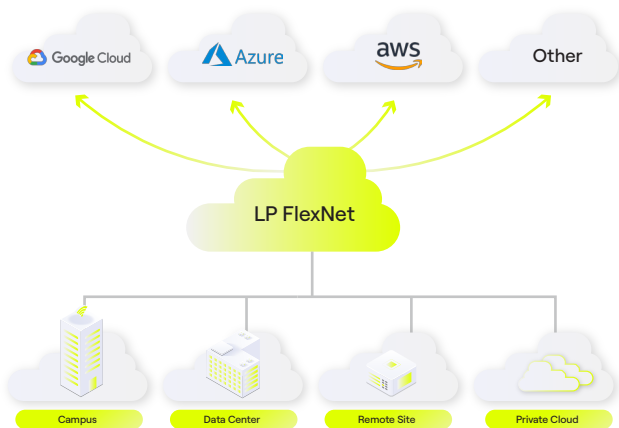


Effective Multi-Cloud Management

Businesses are not connecting to just one Cloud in their IT operations, but several Clouds across Infrastructure as a Service (IaaS), Software as a Service (SaaS), and Platform as a Service (PaaS). However, connecting and managing these workloads and applications with the WAN and remote users is a challenge.

To help reduce this complexity, LP FlexNet enables you to seamlessly extend your WAN to Clouds such as AWS, Azure, and Google, thus providing access to your Cloud-hosted applications. Access to major SaaS services such as Office365 and Salesforce can be optimized automatically, for example, ensuring that the best-performing WAN link is used.

LP FlexNet provides the ability to connect any user and any site to multiple Cloud platforms securely, reliably, and with optimized performance.



Improved Quality of Service (QoS)

Quality of Service means different things to different people. For an end user, it means reliable and predictable performance access to critical applications

and services such as VoIP and Collaboration. For an IT manager, it means overall network and service uptime and performance and achieving that without having to hire a team of network experts.

LP FlexNet delivers QoS to all these communities thanks to advanced features such as:

- Optimized routing of traffic depending on application requirements
- Direct Internet Access (DIA) for applications such as Office365, which recommend DIA for optimum performance
- Load balancing
- Automated WAN failover and fallback
- Dual active-standby routers for high-availability sites
- Blocking of non-business Internet sites and services

LP FlexNet is also “transport agnostic.” It can run on top of Lightpath Internet (DIA), or third-party DIA, broadband, or even Lightpath LTE Backup. It is a simple, versatile, and cost-effective solution.

Enhanced Integrated Security

Protecting your users, sites, and applications from cyber-attacks is one of the major challenges of any IT manager. To add to the challenge, skilled security experts are a scarce and costly resource. Hence, it is ironic that some security products are so complicated that you must hire security experts to manage them.

LP FlexNet proposes an integrated approach to security that enables you to meet the challenge without having to hire a team of security experts. Features such as Intrusion Detection and Prevention (IDS/IPS) and Anti-Malware Protection (AMP) can be

enabled with a few clicks. LP FlexNet also includes an integrated Next Generation Firewall and Remote Access VPN, among other security capabilities that can be configured easily. This means that each site that is a part of the WAN has protection.

The LP FlexNet Dashboard includes a Security Center to view any security incidents in your network at a glance. Among the information displayed by the Security Center is a summary of the security events, the most affected clients and operating systems, the most prevalent attacks, as well as the source country. If you have your own security management platform (a SIEM), LP FlexNet can be integrated with it.

Reduced Total Cost of Ownership

Most of the cost of network ownership is in the implementation and then day-to-day management. The capabilities of LP FlexNet described in this whitepaper contribute greatly to the reduction of the TCO.

In addition, as a managed service, LP FlexNet can further reduce IT support costs. It enables new site implementation without disrupting service to current sites. It securely connects branch locations and even synchronizes security settings across thousands of sites. LP FlexNet provides change management and control for timely changes with an aggressive SLA.

- **Consultative Approach:** Lightpath experts use a consultative approach to assess your requirements and design and implement a custom solution for your unique needs.
- **Managed Service:** Offload the need and costs associated with hiring and maintaining technical staff to manage and secure your network. As a managed service, Lightpath has the expert staff to support your network.

U.S. Coverage

LP FlexNet can be used with Lightpath connectivity within Lightpath's footprint, Type-2 DIA out of our footprint, or you can bring your own Internet connectivity.

Benefit from Lightpath Experience and Expertise

Lightpath provides the reliable, scalable, and cost-effective solutions you need to transform the way you work. All our solutions can be customized to meet your unique networking and security needs.

- Expertise to analyze existing networks and design outstanding and secure LP FlexNet WANs
- Application-aware policies with real-time enforcement around network issues
- Network design expertise to implement high-availability solutions, including device-level resiliency and transport-layer resiliency

Conclusion

With LP FlexNet, you can successfully simplify the management of your complex networks. Enjoy improved productivity and enhanced user experience with consistent service quality and secure access to business applications. It provides the tools and professional expertise to keep your organization agile and secure with cost-effective network connectivity and management.

Call **877-544-4872** and speak with a Lightpath network specialist today or visit lightpathfiber.com to see how we can help your organization.



Lightpath

About Lightpath

Lightpath is revolutionizing how customers connect to their digital destinations by combining our

next-generation network with our next-generation customer service. Lightpath's advanced fiber-optic network offers a comprehensive portfolio of custom-engineered connectivity solutions with unparalleled performance, reliability, and security.

Our consultative customer service means we work with you to design, deliver, and support the solution for your unique needs, faster and more easily than ever before. For over 30 years, thousands of enterprises, governments, and educators have trusted Lightpath to power their organization's innovation.

Learn how Lightpath can connect you to your digital destinations. Visit lightpathfiber.com