As today's enterprises are moving applications and services to the cloud, rigid WAN infrastructures are prohibiting forward progress. Many networks are sitting on unused bandwidth, but excess resources can't easily be redistributed. As a result, WAN performance improvement and the intelligent allocation of bandwidth resources quickly become the crux of the problem.

All of this is why managed SD-WAN is experiencing big upticks. Tackling the bandwidth utilization challenge at its source, SD-WAN can help IT leaders aggregate all bandwidth (regardless of the connectivity type or speed) and use all available connections, all of the time. Want your resources to NOT go unused? These three SD-WAN capabilities make networks and bandwidth dynamically manageable with the ability to architect workload placement and redesign it as needs change.

**Application-Based and Policy-Based Routing**

Managing application traffic is a frequent pain point for IT managers, and application-based routing strikes at the heart of that problem. It continually monitors bandwidth utilization, packet loss, and latency to dynamically select the best path according to whatever parameters you choose. For example, you can always put your VoIP and video traffic on a low-latency link.

Here's how it works. Application-based routing tools make it possible to set policies to switch transports dynamically based on your defined rules, as opposed to the old way of doing things: destination-based routing. With this tool, enterprises can programmatically identify the most important applications and then cascade down from there. The network routes traffic accordingly.

**Dynamic Application Steering**

This SD-WAN feature intelligently steers IP traffic over public and private WAN links to maximize available bandwidth. Dynamic Path Control is important because most companies have multiple WAN links for redundancy’s sake, but...
limitations in routing protocols have made enabling the simultaneous use of multiple WAN links complex. Those idle connections used as a backup waste perfectly-good bandwidth. But with Dynamic Path Control, if you experience a network outage on one link, the system automatically steers network traffic to a secondary connection in less than a second. When all links are active, all available bandwidth is utilized.

**BUYER TIP:** Some Dynamic Path Control features allow you to set policies on a variety of links and apps. This helps to fully use all available bandwidth.

### Centralized Management with Real-Time Analytics

Real-time application performance visibility is one of the biggest advantages of SD-WAN and software defined networks. **Centralized management web portals** allow you to view network and application performance data for the entire WAN in real-time and give you service controls to make adjustments on the fly.

From a single pane of glass, you should be able to get forensic application intelligence regardless of the connection types being utilized. Plus you should be able to “spin-up” an unlimited number of WAN environments, and every virtual instance created should include embedded real-time analytics and service controls.

Advanced Service Controls Include:

- Mobile apps with rapid deployment features, so you can modify bandwidth and provision new SD-VPNs, virtual network functions, and offices from any location
- The ability to view and filter traffic by application, port, protocol, IP address, quality of service plane, and also see which IP addresses generate the most traffic
- Tools to pre-schedule one-time and recurring network modifications
- Flexible capabilities to create as many virtual network instances and segmented environments as you need without paying exorbitant fees
- Real-time, trend and peak analysis with filtering to isolate user behavior and anomalies

**BUYER TIP:** In some cases, providers have bolted on a portal login that is not truly integrated with the rest of their network portal. This is not ideal, because it will directly and negatively impact what level of visibility, flexibility, and control the solution offers. Analytics and controls that are directly embedded into the software defined network avoid those challenges. Also, don’t forget to ask how many virtual network environments (the number of access loops per circuit) you can create without triggering add-on fees.

### ADDITIONAL RESOURCES

- Conversational SD-WAN
- Five Benefits of Managed SD-WAN
- SD-WAN: A Welcome Addition to Your Hybrid Network
- SD-WAN: Meeting the Demands of Digital Business
- Planning a Global Network Refresh? Five MUST-HAVE Questions for your RFP

### About Masergy

Masergy enables global enterprises to innovate, disrupt and dominate their industries with transformative solutions in **secure hybrid networking**, **cloud communications**, and **managed security**. Built on the world’s most innovative Software Defined Platform, our agile technologies, customizable solutions and unmatched customer experience are why leading organizations rely on Masergy to stay ahead of the competition. Don’t fear what’s next. Be what’s next with Masergy. Learn more and follow us on our blog [Transforming Enterprise IT](https://www.masergy.com), Twitter@Masergy, LinkedIn and Facebook. [www.Masergy.com](http://www.Masergy.com)