Boost site performance, reduce costs, and secure your network

Over the last few years the way we work has fundamentally changed. Today, working from the office or branch is common once again, and many companies adopted a part-time work-from-home (WFH) model. In many businesses, employees grew accustomed to working from remotely 2-3 days a week. This means that nowadays any meeting will be an online meeting, with offices seeing up to 70% more traffic than a just couple of years ago. IT departments – traditionally understaffed and constantly under attack – face the added challenge of delivering that additionally required bandwidth while ensuring that applications that moved to the cloud or SaaS during the pandemic can perform at their best when employees are in the office.

SASE requires SD-WAN

As is the definition of SASE, security and networking should be managed and performed from the cloud, and users, things, and sites should be connected to the cloud with advanced secure SD-WAN. For sites and things, this ensures saving on bandwidth costs while also providing exceptional application performance by distributing traffic across multiple uplinks and by selecting the best one for each application. Nevertheless, many SASE solution providers treat SD-WAN as an afterthought, fail to integrate the SD-WAN units into the ZTNA concept, and can even require a third-party solution.

SASE with SecureEdge fully integrates SD-WAN

Barracuda SecureEdge provides secure SD-WAN site devices for tiny desktops up to full-size racks for large offices and data centers, as well as the corresponding virtual images for the most common virtualization platforms. All SecureEdge site devices are fully deployed and managed from the SecureEdge Manager cloud portal, with zero-touch deployment and initial configuration requiring just a few mouse clicks.

The devices are shipped directly to the remote location and only need to be connected to the uplinks, plugged in, and turned on. After just a couple of minutes, the devices have retrieved the configuration and established multiple tunnels to the SASE service. SD-WAN policies for hundreds of known business applications are automatically applied to make the best use of all available uplinks.

Optimized application performance

All Barracuda SecureEdge Site devices automatically make use of sophisticated internet traffic optimization when connecting to the SASE service. This enables sites to grab more of the available bandwidth on shared internet lines for improved application performance.

The underlying technology to remediate packet loss is based on random linear network codes (RLNC), a powerful encoding scheme. Algorithms based on RLNC react much faster to losses and remediate these losses faster on the fly, thereby requiring fewer packet retransmissions and reducing overhead on the devices.
Most apps today are in the cloud – but not all

While most applications today are hosted in the public cloud or even consumed as an SaaS service, there are still workloads that, for various reasons, do not make sense to be migrated to the public cloud. Enabling Zero Trust Access to these apps would often be cumbersome or add odd changes to the daily workflow of end users.

All Barracuda SecureEdge site devices are fully integrated into the service chain. This means that applications protected by a site device just need to be made known to the service with a few mouse clicks, and within a few seconds they are securely available with ZTNA principles attached.

Easy to acquire, deploy, and manage

The Barracuda SecureEdge platform is a single-vendor SASE solution that cleverly integrates and automates its components. The core services are available as SaaS, in Azure Virtual WAN, and even as private instances. Office connectivity is created by zero-touch deployment of a site device with automatic SD-WAN optimization to the service. All of this is centrally managed and enforced via the cloud-based SecureEdge Manager. Intent-based networking and intent-based security policies provide the quickest and most intuitive way to centrally orchestrate a SASE solution, including ZTNA and secure SD-WAN for connectivity.

How Barracuda SecureEdge enables SD-WAN

SD-WAN to Barracuda SecureEdge Service

The quickest and easiest way to apply SASE principles and get all the benefits from SD-WAN. Site devices are rolled out via zero-touch deployment and auto-connect to the SecureEdge SaaS service hosted by Barracuda Networks. Known SaaS applications like Microsoft 365 and Zoom are accessed directly from the branch office.

SD-WAN to Azure, Microsoft backbone

For more demanding deployments, SecureEdge is available as a private service edge location inside Azure Virtual WAN. Cloud managed and cloud secured, this allows for a highly scalable SD-WAN deployment using more than 40 globally available Azure regions while taking advantage of the world’s largest and fastest private network as your private WAN backbone.

SD-WAN with a private Service Edge

For service providers, SD-WAN and SASE services can be easily provided as private edge services on hardware appliances and supported virtualization platforms. All of this is managed from the central SecureEdge Manager web portal while retaining full privacy of the data traffic.
Secure users, sites, and things – and connect to any app

Barracuda SecureEdge is a single-vendor SASE platform addressing the needs of today’s businesses to provide enterprise-class security and application access for any type of organization.

Summary

Barracuda SecureEdge is a single-vendor SASE platform that combines cloud-delivered security for branches, endpoints, and zero-trust application access to any application, no matter where it is hosted, where it is accessed from and for any device whatsoever. Built-in automation, smart defaults, and interoperability of the components all ensure that it is easy to acquire, deploy, and manage, while providing security and an optimal application experience for the end user.