Barracuda

CAN YOU RISK CONNECTIVITY OUTAGE?

Discover better connectivity with firewalls made for the cloud

Solve your network challenges

Your business relies on connectivity. Whether it's providing a service to your customers or joining your workforce, you can't risk losing it. And with a growing number of dispersed networks serving your separate locations and employees, you're putting greater strain on your IT. Plus, the accelerating adoption of SaaS solutions and public cloud platforms is causing regular new network structures to emerge. Amid all this, it's critical to ensure predictable application performance, network reliability and secure connectivity at all times, and at all locations.
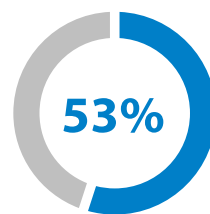
To ensure high quality connectivity and high bandwidth while controlling costs, you need to look to your firewalls. When designed for the cloud, they can guarantee uninterrupted network availability and robust access to cloud-hosted applications. All while simplifying the management of dispersed network infrastructures. And if they're not cloud generation, that is, if they're not made for the cloud? Well, you'll find yourself struggling with everything from cloud automation and application integration to security and protection.

Avoid the high-latency, low-bandwidth struggle

No one wants to wait anymore. Tolerance for latency is rapidly declining. Your customers, employees and partners expect to have their requests dealt with instantly. And if your connectivity isn't up to the job, you could pay dearly.

53% *of users will abandon your mobile site if it takes over three seconds to load[1]*

The max latency for SaaS applications like Microsoft Exchange online is

5ms

If your organisation uses expensive MPLS lines between your central and branch offices, and for bringing internet traffic through central offices, you're going to face serious bandwidth challenges.

MPLS lines are expensive and aren't available everywhere. And despite the promises they make, it's hard to maintain low latency when all network traffic moves from remote offices to HQ, and from there into the cloud.

[1] https://www.ifnetwork.biz/resources/blog/why-it%E2%80%99s-important-improve-your-network-latency

New requirements call for new tools

The pace technology changes at is making previously successful tools redundant. And if you aren't updating your systems in line with your cloud journey, you could lose out on all the benefits you were promised.

If you're migrating workloads to public cloud platforms, like Amazon Web Services (AWS), Microsoft Azure, or Google Cloud Platform, you need solutions with the specific features and scalability to help you enjoy all the benefits of cloud computing.

According to research carried out in 2018, 83% of global organisations have concerns about using next-generation firewalls in the cloud. Of this, 39% believe the pricing and licensing isn't appropriate for the cloud, and 34% state lack of integration prevents cloud automation[2].

So, we need to use firewalls made for the cloud-firewalls made to address these challenges. These cloud generation firewalls will meet a completely new set of requirements around connectivity, scalability, security, integration and deployment. Choosing solutions that don't meet your needs could leave you with a network infrastructure that's hard to manage and can't unlock the benefits of the public cloud.
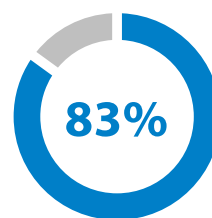
83% *of organizations have concerns about next-generation firewalls in the cloud*

A new route to faster, more secure connections

It goes without saying that faster and more secure connectivity will bring a bounty of benefits to your organisation. From better communication across your workforce to increased productivity, it's an improvement that can give you the edge. Plus, high quality connections enhance your organisation's use of the cloud, as well as your existing networks.

To achieve this, cloud generation firewalls are the answer. A completely unique solution, they combine next-generation security capabilities with connectivity optimisation. Plus, they're easy to manage, and are available in physical, virtual or cloud configurations.

With a cloud generation firewall, you can easily establish and improve site-to-site connectivity. You can reduce network bandwidth costs and IT overheads. And you can handle large deployments efficiently, with simplified rollout and centralised management.
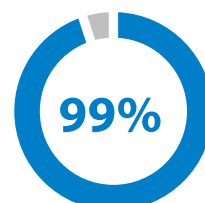
99% *of organizations say cloud-specific firewall capabilities would be beneficial [3]*

[2]Firewalls and the Cloud: A Survey of IT Security Professionals Responsible for Cloud Environments Dimensional Research and Barracuda, March 2018
[3]Firewalls and the Cloud: A Survey of IT Security Professionals Responsible for Cloud Environments Dimensional Research and Barracuda, March 2018

Discover better connectivity

Increase network reliability

Your organisation's performance depends on network reliability. If you can't trust your IT – and more importantly, if your customers can't trust it – you're in trouble.

Barracuda CloudGen Firewalls enable up to

24 links

of consumer-grade circuits to deliver business-grade internet

With cloud generation firewalls, you can ensure predictable application performance, reliability, and secure connectivity at all times and across all distributed environments. When you deploy cloud generation firewalls in multiple locations, they create a fault-tolerant, high-performance wide area network (WAN) using only low-cost broadband lines.

They increase WAN reliability and performance using software-defined wide area network (SD-WAN) technology. Combining up to 24 active, load-sharing connections of any type, including broadband, 4G, MPLS, and even 3G, cloud generation firewalls deliver high-quality connectivity. Due to this, it's easy to upgrade your connectivity. You simply add new links – without the need to change the infrastructure or network.

Plus, advanced data caching, traffic compression and WAN acceleration give you an increase in available bandwidth.

The link failover time of our CloudGen Firewalls is

3 seconds

considerably lower than other vendors

Prioritize business-critical applications

When high volumes of traffic flow through your network, you need to ensure that your business-critical applications take priority. Cloud generation firewalls support SaaS application availability and performance, helping you prioritise what matters most.

Application-aware security and prioritisation ensures that your business-critical SaaS applications, like Office 365, are given the highest priority. You can even set traffic to bypass SSL inspection when you need to comply with Microsoft's requirements.

And you can always ensure there's enough bandwidth for your critical applications. The application -based link selection assigns critical SaaS traffic to the best available uplink. Plus, you make dynamic, on-the-fly adjustments of Quality of Service and application usage policies, depending on bandwidth and latency measurements.
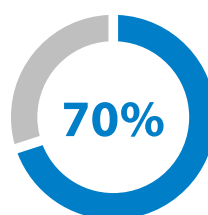
70% *of organisations deploying Office 365 plan to implement branch-to-internet connections and intelligent bandwidth allocation[4]*

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[4] https://www.itproportal.com/news/organisations-unable-to-fully-utilise-office-365-due-to-poor-connectivity/

Better connectivity across dispersed environments

When you have many locations, the challenges of managing a network multiply: from ensuring total security to enabling fast, reliable connectivity. Whether you're in retail and need clarity from HQ to individual stores; or construction, where you need connectivity in remote locations; or in an organisation with offices in different locations, cloud generation firewalls will help.

They're ideal for dispersed environments, as they ensure every site, location and branch has access to the same connectivity.

These firewalls increase efficiency and effectiveness by combining multiple carriers to get the required bandwidth. And they allow for the reduction or elimination of expensive leased MPLS lines.

With cloud generation firewalls, you improve site-to-site connectivity through:

• Creating secure pathways across both multiple WAN connections and multiple carriers.

• Establishing secure VPN connections across multiple sites, using just broadband.

• Ensuring application performance by transparently spanning up to 24 physical uplinks to create highly redundant VPN tunnels.

• Increasing available bandwidth due to built-in caching and traffic compression.

• Speeding up rollout with zero touch deployment (ZTD).

Barracuda CloudGen Firewalls combine highly resilient virtual private network (VPN) technology, intelligent application-based traffic management, and WAN acceleration capabilities. This helps you reduce line costs, increase overall network availability, and improve site-to-site connectivity.

You get improved connectivity for distributed environments, thanks to the combined power of SD-WAN and advanced security.

Stay agile, grow and succeed in the cloud

Customer and user expectations aren't standing still. And traditional WAN performance can block growth. But with cloud generation firewalls, you can stay agile and ensure your entire organisation has the best connectivity available. With a more reliable, secure connection, you can make data-driven decisions, based on up-to-date information and insight.

74%
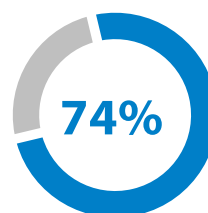
believe a firewall that integrates with cloud management, monitoring and automation capabilities (i.e. AWS Cloudwatch and Azure Security Center) would benefit their organisation[5]

[5]Firewalls and the Cloud: A Survey of IT Security Professionals Responsible for Cloud Environments Dimensional Research and Barracuda, March 2018

You'll have access to transparent and reliable data on sales, customers, or stock levels thanks to enhanced connectivity that brings your whole organisation together across secure, uninterrupted connections.

As your organisation's requirements change, so does the cloud generation firewall. From reliable, fast connectivity to advanced threat protection, you can scale up or down, depending on costs and requirements. And you never need to worry about the bandwidth penalties associated with MPLS. The central management that comes with our CloudGen Firewalls helps you avoid time-consuming small-scale problems. So, you can direct resources toward more productive work.

## Secure your networks without impacting on connectivity

A fast, reliable network is nothing without the right security. And with more and more businesses attacked by cyber-criminals, securing every part of your network is vital.

At Barracuda, we're the only vendor with an integrated full security stack. So, you get deep security inspections, smart policy-based adaptive traffic management, and WAN optimisation technology in a single, centrally-managed solution.

Likewise, you can provide a secure, reliable connection to your remote and mobile users. Barracuda CloudGen Firewalls offer several options for fast and secure access to corporate resources:

- Ensure richer performance and functionality with Network Access Client.
- Provide simple, browser-based remote access for desktop and mobile devices with Browser Remote Access, via our SSL VPN portal.
- Use an intuitive connectivity app, CudaLaunch, designed for BYOD and mobile devices.

Cloud generation firewalls let you establish secure, direct connections across your whole organisation, including cloud and distributed environments. So, you can easily enforce your policies and protocols across all your sites and branches. From software patches to app downloads, from security software to access rights, you can roll out the benefits of better connectivity without rolling back on your levels of control.
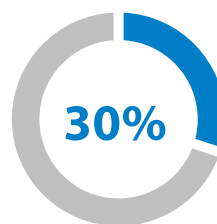
30% *of organisations worry that next-generation firewalls in the cloud don't integrate with native security tools from cloud vendors[6]*

[6] Firewalls and the Cloud: A Survey of IT Security Professionals Responsible for Cloud Environments Dimensional Research and Barracuda, March 2018

Discover better control

Give every site superior security

You can connect all your distributed environments, including branches and sites, to your cloud infrastructure, ensuring central control over data and connectivity. This secure solution doesn't require extra licenses, so you can view and control your entire network from one central point.
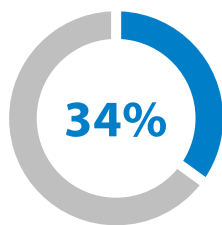
34% *of organisations say that a lack of centralised management across distributed firewalls creates significant overhead[7]*

Our CloudGen Firewalls include zero touch deployment capabilities that let you streamline rollout to large numbers of branch offices or sites that may lack qualified IT personnel. The appliances are shipped directly to the remote location without pre-configuration. Local staff simply unpack the appliance and plug it in, at which point it automatically connects to your Firewall Control Centre.

Full configuration settings are then sent securely to the appliance via an encrypted VPN tunnel, and the appliance becomes part of your security infrastructure. With zero touch deployment, rollouts to hundreds and even thousands of remote locations are executed quickly, managed easily, and completed with fewer IT resources.

Easy adoption of public cloud

A growing number of organisations are moving their IT workloads to the public cloud, to increase flexibility and reduce costs. But this requires a reliable, cost-effective extension of the company WAN to the cloud. And it applies to your HQ, as well as direct internet breakouts at all your branch locations.

Barracuda CloudGen Firewall models work with all common cloud IaaS providers, including AWS, Microsoft Azure, and Google Cloud Platform. Plus, they fit your existing architecture while preparing you for a swift and easy transition to a new, cloud-integrated infrastructure.

The broad range of deployment options – hardware or virtual appliance, AWS, Azure, and Google Cloud Platform – gives you maximum flexibility. And it gives you a cloud-ready network as you continue to adopt more SaaS or IaaS services. With Barracuda CloudGen Firewalls, investments in network infrastructure are long-term and secure.

[7] Firewalls and the Cloud: A Survey of IT Security Professionals Responsible for Cloud Environments Dimensional Research and Barracuda, March 2018

Making your network more effective

Stable, secure, and reliable connections have always required a significant outlay. But cloud generation firewalls help you improve connectivity across your entire organisation in a more effective way. MPLS replacement through SD-WAN gives you more capability, without the associated costs. Compared to traditional MPLS, SD-WAN lets you take advantage of high-value connectivity with no loss of service, security or reliability – but without the high-costs. Likewise, zero touch deployment keeps the costs out of improving connectivity. Even with small rollouts of only a few devices, you

can achieve a return on investment after just a few months. And as cloud generation firewalls have both WAN acceleration and advanced security built in, you don't need to pay out for two separate services.
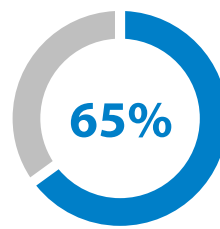
65% *of enterprises say that WAN is the most expensive part of their network[8]*

Barracuda CloudGen Firewalls

Our CloudGen Firewalls give organisations uninterrupted network availability, robust access to cloud-hosted applications, and advanced security. And they scale across any number of locations, platforms and applications.

With Barracuda CloudGen Firewalls, you get access to the Firewall Control Centre. It's designed to manage a large number of firewalls and gives you a comprehensive set of central management services. Features include role-based administration, powerful real-time troubleshooting capabilities, and graphical representation of your entire network.

Our CloudGen Firewalls help you protect against data and service loss, using multiple simultaneous connections. So, you can connect everyone across your organisation and guard against bandwidth availability fluctuations. And while bandwidth demand might be hard to predict, you can rely on our connections to help you cope effortlessly with busy periods.

Barracuda gives you the connectivity to ensure high QoS with low IT overhead for dispersed networks, with:

- Secure SD-WAN and traffic intelligence
- WAN compression
- Failover and link balancing
- Dynamic bandwidth detection
- Dynamic latency detection
- Performance-based transport selection
- Adaptive session balancing across multiple transports of a VPN tunnel
- Adaptive bandwidth reservation
- Application-based routing
- Zero touch deployment

It's redefining the role of the firewall. It's moved from a purely perimeter security solution, to a distributed network optimisation solution.

In addition to typical security and application regulation functions, our CloudGen Firewalls regulate traffic flows and economically route traffic across the extended network while improving performance.

No matter how you choose to deploy your infrastructure and workloads in the future, Barracuda CloudGen Firewalls help you to get the most from the cloud.

[8] Gartner Data Center Conference Dec 2015: Top 10 Ways to reduce Network/Telecom Budget presentation

About Barracuda Networks

Barracuda simplifies IT with cloud-enabled solutions that empower customers to protect their networks, applications and data regardless of where they reside. These powerful, easy-to-use and affordable solutions are trusted by more than 150,000 organisations worldwide and are delivered in appliance, virtual appliance, cloud and hybrid deployments. Barracuda's customer-centric business model focuses on delivering high-value, subscription-based IT solutions that provide end-to-end network and data security. For additional information, please visit barracuda.com.

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