

Intelligent Edge: Securing the Hybrid Digital Workforce

Meet the demands of the cloud-first future and the new world of work with the **iboss Zero Trust Edge Cloud Platform and 3rd Gen Intel® Xeon® Scalable processors.**

At a Glance

- Users connect securely and directly to cloud applications, from any location and any device
- 275% average three-year return on investment¹
- Improves network security by 38% and cut costs by up to 37%²
- The latest Intel® hardware speeds iboss Zero Trust Edge Cloud Platform transaction throughput by more than 20%, compared to previous-generation processors³



iboss is a visionary in innovative cybersecurity solutions, powered by 3rd Generation Intel® Xeon® Scalable processors and the latest in Intel data platform technologies. This combination allows security to “go where users go” with elastic and instant scaling. The iboss solution helps protect against malware and data loss while eliminating the need for traditional security appliances.

Challenge

Traditional on-premises, purpose-built security appliances cannot supply the level of security needed by today’s modern companies, which often have many remote workers and need transactional speeds that cannot be supported by traditional virtual private networks (VPNs).

Solution

iboss has built a global, containerized cloud architecture making it the only Zero Trust platform that can control what the National Institute of Standards and Technology (NIST) refers to as the “Implicit Trust Zone” to ensure that all protected resources (applications, data, and services) are protected and inaccessible without going through the iboss Zero Trust Edge. iboss reduces cyber risk for organizations that are protecting resources that are located everywhere (in the cloud and on-premises) with users accessing the data from anywhere.

The iboss Zero Trust Edge Cloud Platform is cloud-native and runs on the latest innovations from Intel, including 3rd Gen Intel Xeon Scalable processors with Intel® Crypto Acceleration and Intel® QuickAssist Technology.

Results

In tests performed by iboss, combining the iboss Zero Trust solution and the latest Intel processors speeds transaction throughput by more than 20 percent, even when Secure Sockets Layer (SSL) decryption is enabled.³

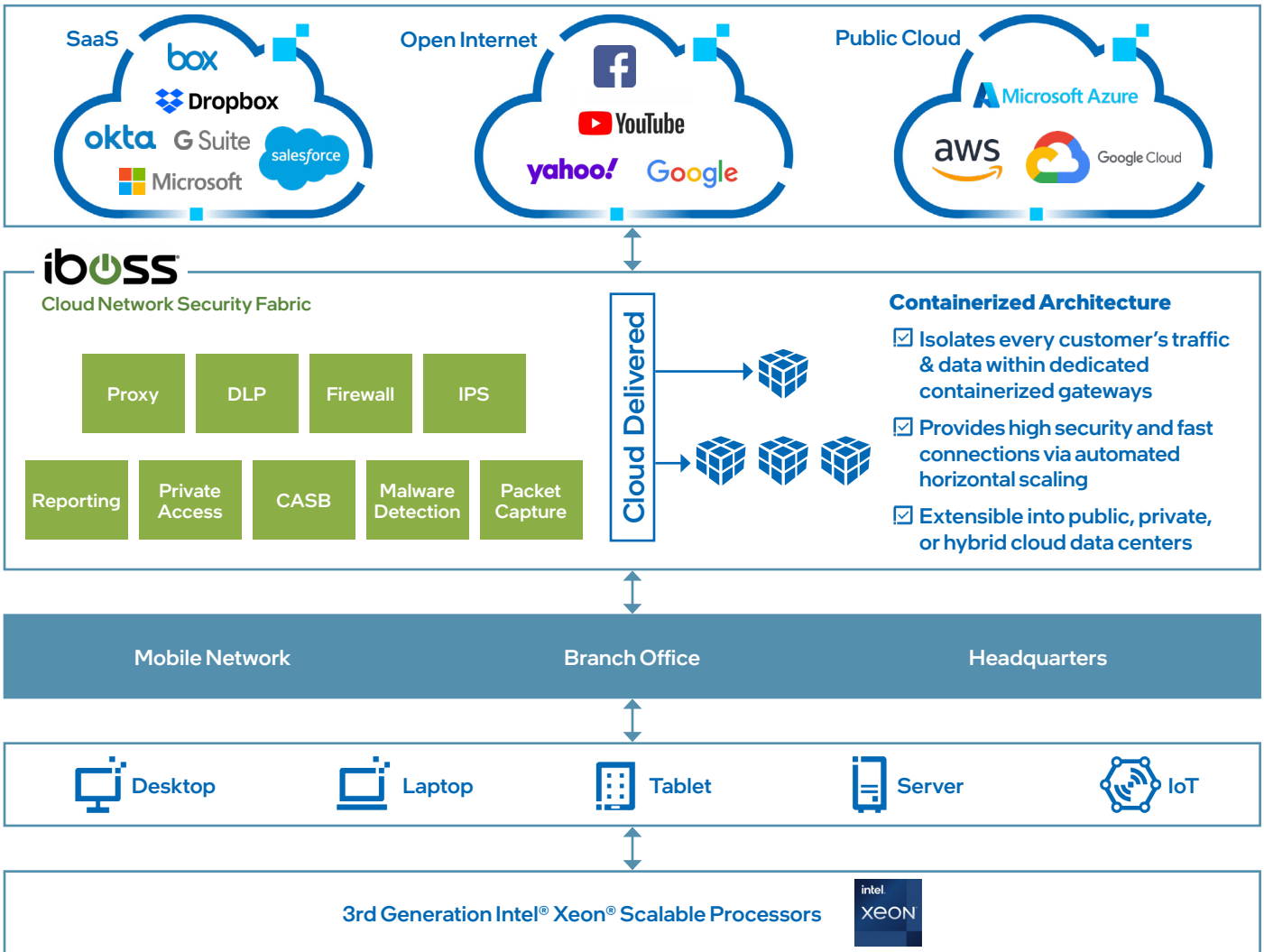


Figure 1. With users working from anywhere and data and applications in the cloud, the iboss Zero Trust Edge Cloud Platform provides internet access on any device, on any network, from any location.

Traditional Network Security Appliances Are Not Effective in the Modern Workplace

An enterprise security model that focuses on securing the traditional corporate network perimeter is no longer sufficient in today's enterprise computing environment. First, enterprises can no longer assume that everything on their corporate networks is secure, as illustrated by recent information security breaches. Second, applications, services, data, and even devices are increasingly moving "beyond the edge." The COVID-19 pandemic has accelerated key trends that are reshaping work. These trends include extensive use of videoconferencing and a new acceptance of virtual meetings and other virtual transactions such as telemedicine and online banking. In short, the network perimeter has eroded, making traditional network security appliances ineffective at securing users and devices that are no longer constrained by physical, on-premises network boundaries. Companies must balance the great dichotomy of employees seeking flexibility and reliable internet access from anywhere and any device with the organization's need for agility and resiliency.

Network Security Must Follow the User

A new approach to network security is emerging: Zero trust. This approach changes the paradigm from focusing on network access to focusing on data access. Zero Trust is based on three core principles: all entities are untrusted by default, least privilege access is enforced, and comprehensive security monitoring is implemented. Thanks to the proliferation of endpoint devices and burgeoning cloud technology adoption, the global zero trust security market size is predicted to grow from its 2020 value of USD 19.8 billion to USD 51.6 billion in 2026 (a compound annual growth rate of 17.4 percent).⁴

iboss has built one of the only global containerized Zero Trust cybersecurity cloud footprints. The iboss Zero Trust Edge Cloud Platform helps secure user internet access on any device, from any location and in the cloud. iboss' customers include some of the world's largest organizations, who depend on iboss to ensure uninterrupted secure access to all business applications while users work from home or around the globe at remote locations. The iboss Zero Trust Edge Cloud Platform provides fast and secure Internet access at all times to increase user productivity.

“The right cloud infrastructure and architecture is the key to transactional performance.”

Paul Martini, CEO and Co-Founder, iboss

The unique software-based approach to secure connectivity used by the iboss Zero Trust Edge Cloud Platform reduces the need for and dependency on virtual private networks (VPNs), which can be a bottleneck for users needing to access cloud applications. Iboss users connect directly and securely to cloud applications without relying on a slow VPN. Not only do iboss customers get ultra-low latency, but they can also reduce overall costs by removing cloud traffic from internal network connections and reducing VPN license costs and support. In addition, the containerized architecture helps increase compliance with national and local data sovereignty and privacy regulations.

The iboss solution is built on a proprietary, containerized architecture specifically designed for the cloud. Wherever they are located, iboss users are always connected to the iboss solution, helping ensure that all internet traffic is always secured for compliance, web filtering, malware defense, and data loss. Customers can rely on iboss to provide network security regardless of where users go, with elastic and instant scaling to meet changing bandwidth needs.

Underlying the software-defined iboss solution is powerful Intel® hardware. 3rd Generation Intel® Xeon® Scalable processors are an excellent choice for SASE workloads because they offer many security innovations, including Intel® Crypto Acceleration and Intel® QuickAssist Technology (Intel® QAT). These features can increase the performance of encryption-intensive workloads including SSL web serving and 5G infrastructure while reducing the performance impact of pervasive encryption. These processors provide up to 40 high-performance cores and a wide range of frequency and power levels, and are engineered for the demands of cloud workloads and to support a wide range of XaaS environments, including the iboss Zero Trust Cloud Edge Platform.

Solution Ingredients

- [iboss Zero Trust Edge Cloud Platform](#)
- [3rd Generation Intel® Xeon® Scalable processors](#)
- [Intel® QuickAssist Technology](#)
- [Intel® Ethernet products](#)

Helping Customers Break through Digital Transformation Challenges

iboss customers are global enterprises with complex use cases. They can't afford to allow network security challenges to slow them down. To keep up with customers'

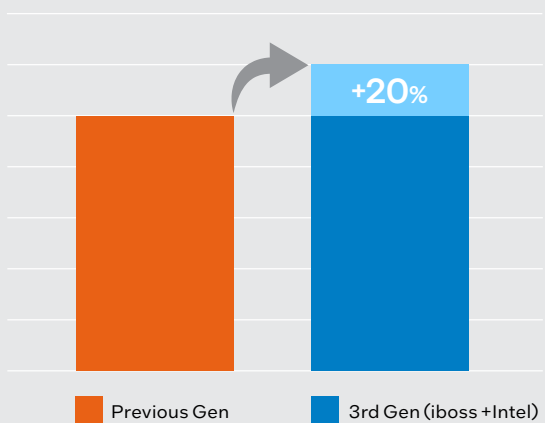
continual growth in internet traffic and bandwidth demand, iboss is expanding its data centers and upgrading its infrastructure with the latest Intel technology to continue to deliver the experiences that its customers have come to depend on as well as meet demands for the new world of work.

The goal is transactions that occur at line speed without compromising network visibility and security. 3rd Gen Intel Xeon Scalable processors and Intel data platform technologies are helping iboss meet and exceed their performance and latency targets, delivering efficiency and scale. Intel and iboss collaborated on tests running the iboss Zero Trust Edge Cloud Platform on 3rd Gen Intel Xeon Scalable processors. Results showed that, even with SSL decryption active, these processors outperformed previous-generation processors by over 20 percent.⁵

“Deep collaboration to enable iboss’ Zero Trust solution to fully take advantage of the latest Intel technologies creates unbreakable value to organizations needing sophisticated enterprise networking and security solutions.”

Bob Chaffari, General Manager, Enterprise and Cloud Networking, Intel

Increase on speed transacting



Intel and iboss collaborated tests results.

Figure 2. The combination of innovations from iboss and Intel increases the speed of transacting while supporting the secure connectivity global enterprises need.

Collaboration Helps Improve Edge Security

With the goal of scaling globally while maintaining high performance as well as comprehensive threat intelligence and network visibility, iboss engineers knew they needed a computer hardware provider that could match their software innovation levels. Intel was a natural choice because the company has a reputation for providing processors designed specifically for cloud-based, compute-intensive workloads. Intel and iboss have been working together for two years, continually pushing the envelope for anywhere/always-on network security.

The two companies' engineers worked closely, often texting back and forth to solve configuration issues and design tests to demonstrate the value of running the iboss Zero Trust Edge Cloud Platform on Intel hardware. Intel also helped the engineers select a best-fit original equipment manufacturer (OEM) to provide servers and served as a trusted technical advisor.

“ Since we started working with Intel, we’ve never looked back. The co-innovation between Intel and iboss delivers what our customers need. ”

Paul Martini, CEO and Co-Founder, iboss

Spotlight on iboss

iboss is a cloud security company that enables organizations to reduce cyber risk by delivering a Zero Trust service designed to protect resources and users in the modern distributed world. Applications, data, and services have moved to the cloud and are located everywhere, while users needing access to those resources are working from anywhere. Built on a containerized cloud architecture, iboss delivers security capabilities such as secure web gateway (SWG), malware defense, browser isolation, Cloud Access Security Brokers (CASB), and data loss prevention to protect all resources, via the cloud, instantaneously and at scale. This shifts the focus from protecting buildings to protecting people and resources wherever they are located. Using a purpose-built cloud architecture backed by more than 230 issued and pending patents and more than 100 points of presence globally, iboss processes over 150 billion transactions daily, blocking 4 billion threats per day. More than 4,000 global enterprises trust the iboss Cloud Platform to support their modern workforces, including a large number of Fortune 50 companies. To learn more, visit <https://www.iboss.com/>.

Find the solution that is right for your organization. Contact your Intel representative or visit <https://www.iboss.com>.



¹ IDC Business Value Report, <https://www.iboss.com/the-platform/idc-report/>

² See endnote 1.

³ Results provided by iboss and were based on internal tests as of January 2022. Please contact Salesforce for further details.

⁴ “Zero Trust Security Market by Solution Type,” <https://www.marketsandmarkets.com/Market-Reports/zero-trust-security-market-2782835.html>

⁵ See endnote 1.

Performance varies by use, configuration and other factors. Learn more at intel.com/PerformanceIndex.

Performance results may not reflect all publicly available security updates. See configuration disclosure for details. No product or component can be absolutely secure.

Intel technologies may require enabled hardware, software or service activation.

Your costs and results may vary.

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