



Do your doctors complain when they are trying to pull up the client's latest scans from your EMR system? Do your accountants complain about how slowly their accounting software loads? Are your front-line Sales Reps complaining about your internal systems taking forever to complete their task?

Whether your server is running an application, a website, a database, a file server, or any other service, your storage performance is often the most overlooked aspect of a server environment. Storage performance is usually the most important factor in delivering an agile product to your users. For that reason, it is important to make sure your system has the right disk throughput and IOPS.



#### What Is Disk Throughput?

Disk throughput is the measurement of how fast (per second) your storage can read/write data. You may have seen this number before when looking at a new hard drive (HDD) or new solid-state disk (SSD). This is typically written in MB/s or megabytes per second. Keep in mind, even if your latest HDD is rated at a max transfer rate of around 200 MB/s, you will likely see a much smaller transfer rate depending on your application, file size, number of users, server load, etc.



#### What Are IOPS?

IOPS (input/output operations per second) is a lesser-known measurement of HDD or SSD performance. IOPS is a performance measurement of your storage which measures the amount of read/write operations your storage can do in a second. This indicator is critical to determining performance under heavy use; a higher IOPS ensures that when a doctor is pulling some medical records at the same time your accountant is pulling a years' worth of receipts while your internal ticketing system is cleaning up unused files, your system still runs smoothly. All these actions utilize the total amount of IOPS your storage device has available.



### **How Does Atlantic.Net Compare?**

Atlantic.Net's Cloud offering was built with performance and redundancy in mind, and it's no surprise that Atlantic.Net comes out on top when comparing IOPS and throughput to AWS and Azure versus their standard SSD options.

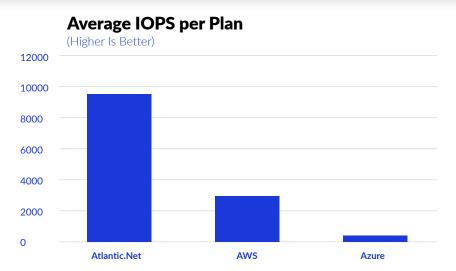






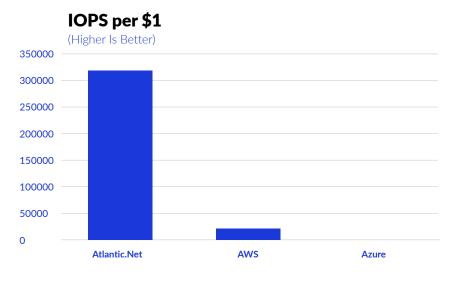


#### **IOPS - The Least-Known Key Storage Performance Metric**



Across all of Atlantic.Net's plans, Atlantic.Net averages 9525 IOPS per server versus 3020 IOPS on AWS and 446 IOPS on Azure.

Atlantic.Net is up to 215% faster than AWS Atlantic.Net is up to 2035% faster than Azure



Not only does Atlantic.Net outperform, Atlantic.Net is also more cost-effective at \$.03 per IOPS versus AWS at \$.15 per IOPS and Azure at \$1.45 per IOPS.

Atlantic.Net is up to 400% less expensive than AWS Atlantic.Net is up to 4733% less expensive than Azure





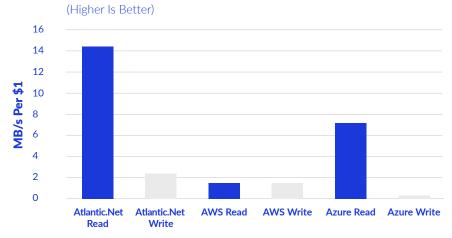




#### **Throughput for Cost-Effectiveness**

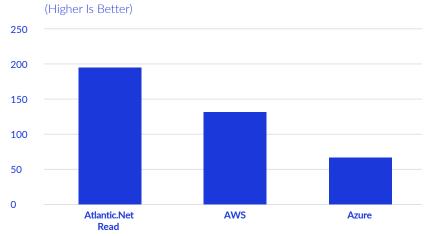
Throughput is another major factor when it comes to storage performance. Higher throughput is available from every major cloud provider; however, it will come at a cost. Take a look at the cost versus megabytes per second throughput below. Atlantic. Net outshines the competition here on both read and write throughput cost-effectiveness.

### Cloud Comparison of MB/s Per \$1 Spend



#### On Sequential Writes:

### Sequential Disk Writes MB/s



Atlantic. Net also outperforms AWS and Azure on Disk throughput on a sequential disk writes. Atlantic. Net averages 192.92 MB/s versus AWS at 129.8 MB/s and Azure at 65.71 MB/s.

> Atlantic.Net is up to 48% faster than AWS Atlantic.Net is up to 193% faster than Azure







#### On Random Writes:

### Random Disk Writes MB/s



On a random write throughput test, Atlantic.Net averages 34.63 MB/s versus AWS averaging 12.70 MB/s and Azure averaging 22.38 MB/s.

Atlantic.Net is up to 175% faster than AWS Atlantic.Net is up to 154% faster than Azure

With cost-effective storage solutions for your team, Atlantic.Net outperforms the competition. Along with strong storage performance, Atlantic.Net also provides a wide array of managed services, including backup as a service, firewall as a service, security as a service, and more. If you have any questions about Atlantic.Net's storage performance or your cloud environment, please call 888-618-DATA or email sales@atlantic.net for a free evaluation of your environment to see how Atlantic.Net can help you today.



## Ready to Experience Atlantic. Net's Storage Performance Firsthand?

Atlantic.Net stands ready to help you attain fast compliance with a range of certifications, such as SOC 2 and SOC 3, HIPAA, and HITECH, all with 24x7x365 support, monitoring, and world-class data center infrastructure. For faster application deployment, free IT architecture design, and assessment, visit us at www.atlantic.net, call 888-618-DATA (3282), or email us at sales@atlantic.net.

