



Regulatory Compliance

Security:

From a security standpoint, disk, tape and DVD, none of them meet the [regulatory requirements of Sarbanes-Oxley or HIPAA](#) simply because they are generally not encrypted. Every high profile data loss incident that you read off in the news is around an unencrypted backup that's where physical control has been lost to that; a tape is misplaced or a laptop is misplaced. With online backup, every piece of **data is encrypted in your local environment** before it is transferred. It is sent over an encrypted tunnel to our datacenters and then it is re-encrypted and stored on the server side.

Management:

Online backup is far more affordable. Your overall cost, whether you are talking about physical capital cost of actual equipment software or whether you are talking about operational cost and the hidden cost associated with for example downtime - online backup is about 50% less expensive than traditional backup solution. Case studies illustrate that total cost on their tape array, the capital equipment cost, the capital equipment is the physical hardware and the software; I am not looking any of the labor cost associated with these backup solutions though the labor cost is very substantial. It is time taken away from your business that prevents you from doing what you do the best. In some studies, the labor costs associated with tape backup are shown to be as much as 100% of the capital cost. Just looking at capital cost on this backup solution, the price tag was \$6,146 for the initial deployment and then the total five year cost. There was then recurring cost on various pieces of capital equipment. The total five year cost was \$9,130. In contrast to this, when they move to SOS, the total cost to backup their entire business was \$1,800 a year- that's only 29% of the first year cost of the tape backup solution.

Cloud Based Backup Solution:

Contrasting with the centrally architected backup solutions in the world of a cloud based backup solution, we take the software, the hardware, the service and the support you need and we wrap it all up in our turnkey service solution backup offering.

Storage Moving to the Cloud:

Just in terms of statistics, a recent survey by CTO Edge magazine has got as many as 70% of the enterprise CTOs who was surveyed moving some or their entire backup to **cloud-based backup**. There is a real ground-swell going on in the market with millions of people moving to cloud-based backup. We are one of the leaders of that industry and we would really like to see you, using our **technology to protect your data**.



With our cloud backup service solution you get access to our global infrastructure grid of 10 datacenters worldwide and 5 in the United States, our award-winning software and then our professional services team who will assess, deploy and manage your backup and then they are supported by our training and support organization who will continue to work with you and protect your data throughout the lifetime of your subscription with our service solution.

Online Backup is the Cornerstone Technology for Using Data in the Cloud:

Our company has always focused our product strategy around three pillars- Protect, Access, and Share.

When we talk about protect, we mean **backup and recovery**. We focus on having world-class **Best of Breed backup and recovery technology**.

We believe in two-stage backup. You should always have a full **local backup of your data** and then have a **cloud backup of your data**. Unlike other online backup companies, we have invested heavily in our **local backup technology** which allows you to continue having **full local backups** of all of your data as well as using our online backup technology to make certain that your most crucial data is being protected.

KEY FEATURES OF SOS'S TECHNOLOGY:

Continuous Data Protection: This is our live protect system. What this refers to is the fact that not only will we run backup schedule, but we can actually continuously monitor individual files that you need to be backed up and every time that content is modified, the system will then detect that change and immediately back it up to the cloud.

Enhanced Security & Privacy: Our UltraSafe security model is a **private key encryption model** where we encrypt the data with **military grade encryption** before the data ever leaves your PC or your office and we can do that with a key only known to you so that literally even if somebody would get access to our backend which has never happened and we got very deep protection, both physical and network around our infrastructure obviously, but even if that were to happen the data is absolutely useless without the encryption key that only you know. It is our UltraSafe security system and something that a lot of **small business with sensitive data** like accounting businesses or medical businesses will leverage.

Compression & Transfer System: It is really a fact that we optimize the bandwidth consumption. A lot of our customers use DSL connections and the way SOS works is on day#1, it will backup all of the data to the cloud, but thereafter on each day all it will do is backup the incremental 1s and 0s, the binary code that has changed from day to day.

Intelligent File Filters: With file filters, you can tell the system what types of files to backup and what not. You can tell it for example, no videos, if that is going to fill up your backup account you don't want that pushed to the cloud.



Physical Media Upload: If you have got **lot of data to backup**, we can actually FedEx you a hard disk drive and will run the backup to the hard disk drive. It is still fully encrypted and secure and then ship that back to us and we will upload it to the datacenter. This is important for customers who are concerned about how much bandwidth online backup is going to use.

Powerful Recovery: We have built a **timeline based recovery system**, which lets you see every single backup that you have ever run on your system and recover your system back to any day you have run a backup. I can roll my system back to see how my dataset looked at previous points in time even if you have 5 years worth of data backed up to the SOS cloud.

Unlimited Versioning: This is a set apart feature. We will store every single version of a file for you. A lot of small businesses actually use this as a document management system. If you have got a file which is changing regularly, great example would be QuickBooks database or other financial information for a business and that file is changing every day, we will store an unlimited history of versions for that file at no charge to you.

Unlimited Archiving: If we look at competitive technology, take Mozy for example, if you delete a file on your PC, Mozy then deletes that file from the cloud because they say that backup is only about backing up what is on your PC, to keep it in the cloud they would call archiving. At SOS we believe that no data should be removed from the cloud until you, the user explicitly tell us to delete the file from the cloud and why simply because accidental deletion is one of the leading causes of consumer and **small business data loss**. Deleting the content locally and subsequently you discover you didn't want to delete locally can lead to enormous problems if that data has then been purged from your cloud backup. We don't do that. We maintain that archived copy for you until you no longer need it.

The SOS Global Data Grid:

In terms of our global infrastructure, we have got 7 primary datacenters that we use for customer storage. We have got 5 datacenters in United States, mainly in Texas and Los Angeles. All of the data for American customers and North American customers are stored in North America so generally your data will be stored at the closest physical datacenter that is proximate to your location.

In terms of where our customers are globally, there are millions of customer accounts on our system, but it is mainly clustered in North America, Europe, and Asia, so we are very much a global firm.

YOUR BENEFITS

Technology:

We have got the best of the breed technology in the market. With our local backup, continuous data protection, multi-site replication, mobile access and recovery, and a product that really spans all three spaces of consumer, enterprise and the small business space is our key focus.



Price Point:

The total cost of ownership of backing up your business with us is lower than not only competitive technologies such as tape or disk, but also other online backup providers.

Delivery & Support Infrastructure:

Our delivery and support infrastructure is really where we shine. There is no comparison to our Blue Sky offering to have an expert backup engineer assess your business, analyze your requirements, in fact deploy our software and monitor and manage that backup so that you know your business is protected. We backup your business so you can focus on what you do best. The peace of mind that comes with that is really unparalleled and for a total cost of ownership at as little as 16% of the case study we looked at of competitive technologies.

Encryption Method:

We use the **AES encryption standard** as recommended by the US Department of Defense. Some of our earliest customers were government entities, both here and internationally. We encrypt data first in the sandbox on the machine that is being backed up on. The data is then shipped over a VPN tunnel to our datacenters and then re-encrypted in our datacenters before it is put at rest on our storage and archiving server infrastructure, which is all SOS's proprietary technology. Nobody has access to that data other than SOS. Again, if you are using the UltraSafe security model, the only person who has the decryption key for your data is yourself. If you lose that encryption key, that would be a challenge; we simply cannot recover data for customers.

There are two security models. Standard SOS security model where you can reset your password and that's where we basically have your encryption key, but then we have some other security questions that get set up when you create your account on our system. If you lose your encryption key on your account and if you can then answer the backup security questions, then you can reset your encryption key. With the UltraSafe security system, that mechanism is not available. You set your encryption key, you can change it anytime, but there is no way to reset that encryption key. It is a full private key encryption system. We recommend for those customers, since we have a lot of accounting customers and medical customers and banks preferring this feature and we literally recommend taking a physical copy and putting it in a safe deposit box in a safe physical location that you will always be able to get access to.

What is the impact on productivity and response times for network users when continuous backup is running?

For network users, it doesn't have a significant burden. The reason I say that is if you think about continuous backup, you are talking about a file that is versioned a lot. If you think about the way online backup works, the heavy network load comes from what is called the baseline backup, that's the first backup effectively. In the consequent backups, only the incremental binary difference between the first version of file and the second version of the file is being transferred so the network burden is very low. For continuous backup, the network burden is very low, having said that the computational burden is not insignificant. I am referring to CPU and memory and local resource cycles required to compress, encrypt, and compare and now that really varies by the horsepower of your computer and the type of



content that we are dealing with. With regular business data, databases, office documents, it is trivial. With videos and other heavy binary data, it can be quite significant. The very short answer to your question is, the resource impact of continuous data protection is usually very low, but if you have got large binary files like large movie files for example, it can be significant.