

## Case Study

Strand Diagnostics simplifies data backup and DR using one comprehensive platform



- Manual and unreliable “Frankenstein” methodology replaced with Asigra Cloud Backup™
- Four-tier approach uses multiple on-premise and cloud backup processes to better align costs of protection with the value of the data
- Includes cloud-to-cloud backup of Office 365 data and local Virtual Disaster Recovery of on-premise VMware storage
- Complies with HIPAA requirement for FIPS 140-2 certified AES 256-bit encryption



## SUMMARY

Data protection is of critical importance to Strand Diagnostics, which manages biological specimens for criminal cases and identity confirmation. But when Echopath, an IT Services Provider in Indianapolis, IN, took over the day-to-day management of Strand's IT systems, they discovered a piecemeal approach to backup and disaster recovery policies and labour-intensive processes that weren't reliably repeatable. Echopath's solution was to rapidly implement a multi-tiered approach that uses industry-leading Asigra Cloud Backup™ software to manage the full range of Strand's local, offsite, cloud-to-cloud and long-term archive data protection requirements — all to the stringent encryption requirements for personal medical information.

As a comprehensive provider of identity confirmation testing services, Strand Diagnostics uses cutting edge technology to serve the criminal justice system and life sciences sector. Founded in 2005, the Indianapolis, IN, company operates at the forefront of molecular diagnostic testing with a state-of-the-art facility and 40 employees, including a premier team of scientists, and is positioned to become a leader in the delivery of next-generation personalized medicine.

Strand Diagnostics is primarily known as the developer for the Know Error DNA Specimen Provenance Assay (DSPA) and tissue biopsy kits that use forensic DNA technology to prevent specimen misidentification, which can otherwise lead to incorrect diagnosis and unnecessary treatment and surgery.

## BUSINESS SITUATION

In early 2015, Strand's previous Director of IT left to pursue a new career opportunity, and the company had to move quickly to fill the void. Facilities Director and Compliance Officer Dr. Gay Bush identified two top priorities: first, keep the IT system going at all times — if the infrastructure fails in any aspect, the scientists aren't able to work — and second, maintain compliance with Health Insurance Portability and Accountability Act (HIPAA) data privacy and security provisions for safeguarding medical information.

"I am a scientist; I am not an IT person," says Dr. Bush, who holds a Ph.D. in biochemistry and manages Strand's laboratory, in addition to holding responsibility for all compliance matters and managing the contracts by which Strand maintains its infrastructure. "I need someone on our team who can deal with the fact that computers are frequently whimsical creatures, but also someone who can help with setting the correct policies to maintain the security we need."

### STRAND DIAGNOSTIC IT ENVIRONMENT

- 65 workstations and laptops
- 3 Local VMware ESXi hosts
- Microsoft Office 365 suite of cloud-based productivity and collaboration software tools
- Legacy scientific software requiring specialized maintenance and integrations

### ECHOPATH ENTERPRISE DATA BACKUP SERVICES

- Fully managed IT services for servers, workstations and network management
- DS-System level cloud backup of all file data
- Cloud-to-cloud backup of Office 365 Exchange and SharePoint operational data
- Local Virtual Disaster Recovery of on-premise VMware storage
- Archive data backup for long-term file retention

Enter Echopath, an IT Managed Services firm also located in Indianapolis. Echopath seamlessly took over management of all servers, networks and about 65 workstations/laptops, including Strand's Office 365 and VMware environment, even its specialized scientific software that requires a Windows XP environment. It was also able to coordinate projects designed to take advantage of underutilized investments Strand had made in VMware licensing and server hardware, which ultimately created a more robust IT environment. "I was a little hesitant about whether we could get the service that we need from technicians who weren't on site," says Dr. Bush, "but I have to say those concerns were groundless. They have been extremely responsive to any request."

Although Echopath quickly had the day-to-day running of IT in hand, the firm soon uncovered issues regarding backup and disaster recovery (DR). Echopath already held the contract for offsite backups of specified archive data, but Strand had been using a separate platform for local backup and a labour-intensive methodology of manually transferring data via FTP into a cloud service.



"It was a very burdensome and fragmented way of protecting data—a Frankenstein approach to backup," says Chad Whaley, CEO of Echopath.

For Dr. Bush, what had been an irksome need to manage multiple contracts with various third-party backup point solutions rapidly turned into a high-priority data protection issue.

“I have a very subjective measurement for success. It's really how much time do I have to spend thinking about problems? And I don't spend much time at all thinking about problems with respect to IT anymore.”

Dr Gay Bush  
Facilities Director and Compliance Officer  
Strand Diagnostics

## SOLUTION

Echopath proposed a multi-tiered approach to backup and DR using industry-leading agentless Asigra Cloud Backup software, a single comprehensive platform that would manage the full range of Strand's local, offsite, cloud-to-cloud and long-term archive data protection requirements — all meeting the strictest security requirements with the FIPS 140-2 certification for AES 256-bit encryption required under HIPAA.

The top priority was to establish a seamless solution to back up data off site. Echopath quickly deployed Asigra's agentless software architecture and was seed loading within two weeks. Echopath also implemented separate processes to back up Strand's cloud-based Microsoft Office 365 platform, in particular its operationally critical SharePoint data.

At the same time, Echopath was able to use, at no additional licensing cost, a local Virtual Disaster Recovery methodology for Strand's on-premise VMware environment. Asigra's Local DS-VDR enables Echopath to recover quickly from a host failure by simply turning on a backup copy of the virtual machine in Strand's local environment. And, of course, Echopath continued with the pre-existing archive data backup processes for long-term retention.

The end result was a four-tier approach to data protection that used a variety of backup processes to better align the cost of protecting the data with its value. By working closely with Strand Diagnostic's IT environment, Echopath

had determined that while some of its data certainly needed more robust and reliable backup than it had previously had, not all of its data required the same level of protection.

“Any concerns I had about getting the service we need from technicians who weren’t on site were groundless. They have been extremely responsive to any request.”

Dr Gay Bush  
Facilities Director and Compliance Officer  
Strand Diagnostics

## RESULTS

Strand Diagnostics’ IT Service Provider now has a single solution with which its technicians administer backup processes, protecting upwards of nearly 2TBs of data after compression and deduplication with nightly offsite and local backups.

From Dr. Bush and her team’s perspective, it all just happens seamlessly in the background. Echopath holds calls with her twice a month to provide a status update on all IT matters, including data backups.

More than anything, she’s relieved to have only one backup and DR platform on the books. “Prior to this, I’d been dealing with discovering the fact that we had different backup solutions from different third-party providers for different issues. It was just a mare’s nest of contracts,” she reflects. “That is now gone. Having a single solution that our IT people know how to manage makes me more confident that should we need those backups, they’ll be able to restore them quickly and efficiently.”

Whether it’s the day-to-day IT or data protection strategies for the worst case scenarios, working with Echopath has provided Dr. Bush with ample peace of mind. “I have a very subjective measurement for success,” says Dr. Bush. “It’s really, how much time do I have to spend thinking about problems? And I don’t spend much time at all thinking about problems with respect to IT and data protection anymore.”





## About Echopath LLC

Echopath is an IT services provider specializing in Enterprise Data Backup, DRaaS (Disaster Recovery as a Service) and IT Managed Services. Echopath stands out from the crowd by not just selling software, but by co-managing a solution. Based in Indianapolis, IN, Echopath is dedicated to protecting client's data's confidentiality, integrity, and availability. Our co-managed solution provides the support organizations need for hassle-free backup and disaster recovery.

For more information, visit: [echopath.com/enterprise-backup/](http://echopath.com/enterprise-backup/)

To speak with a specialist, call: **855-337-2225**.

