Life & Health

ComplianceWire® Data Center

DISASTER RECOVERY INFRASTRUCTURE

The UL platform is offered via the Software as a Service (SaaS) model. This widely-used outsourcing model allows us to design and maintain the computer hardware, software, security and personnel we need to deliver our solutions, without our clients incurring excessive capital investments and operational commitments.

Our expert IT staff is responsible for creating, managing and supporting our technology-based solutions, to assure that all systems run smoothly and securely in our wholly-owned data center facility.

Physical Security

Our best-of-breed, state-of-the-art equipment is hosted in the data center with 24x7x365 on-site security, regulated access key control, redundant power feeds, back-up electrical generator capacity and other equipment designed to keep servers up and continually running.

Perimeter Defense

Networks are protected by multiple state-of-the-art firewall systems. The data center network is automatically monitored for intrusion detection and other malicious activity including viruses.

Internal Systems Security

Industry experts designed our security scheme. We use multiple levels of measures, such as network address translation, to maintain systems security.

User Authentication

Users access UL solutions only with a valid Login ID and password combination. Robust, proprietary encryption technology is used when ID and passwords are transmitted.

Application Security

Our solutions have been designed from the ground up to ensure that users cannot see another user's information. This security is enforced at Login and at every page request.

Capacity

UL utilizes hardware and web server and application software that is redundant and scalable. In addition, we regularly measure and trend key performance and capacity metrics, which are reviewed weekly by senior management and drive upgrades and expansion to our infrastructure and servers. Adding capacity to our web/application server tier is relatively easy. Our Key Performance Indicators show that at peak times we are running at less than 15% of our capacity on our existing hardware and software. As required, we can scale out by adding more servers to the load balanced web application tier solution. This will allow UL to easily scale to a factor of 10 or more.

Operating Systems Security

All servers are protected by proven operating system-level security. Access to servers is strictly controlled and limited to system administrators and engineers. Robust passwords are used on all servers.

Database Security

Access to the database is tightly controlled through application level security. Non-application access is controlled by physical security and network passwords.

Reliability and Backup

All key networking components – routers, firewalls, web servers, database servers and data arrays – are redundant to remove single points of failure. Data is backed up daily and stored onsite in a fire-resistant vault. Weekly backups are stored offsite, also in a fire-resistant vault.

Disaster Recovery Infrastructure

We have comprehensive policies, procedures and investments in hardware and communications capabilities, all of which protect against significant disruption to our systems and the data within them.

We have redundant T-3 communication lines in Houston, TX, a T-3 line for the data center in Brentwood, TN, as well as hardware at the Brentwood facility that is designed to support client activities if there were to be a catastrophic failure at the main data center in Houston, TX.

Additionally, we perform backups of our production systems so that no more than 15 minutes of data would be lost in the event of a disaster. These backups reside at the main data center in Houston, TX, and are also transmitted to our backup data center in Brentwood, TN. In addition, every 24 hours the data is written to a magnetic tape and sent offsite for an additional level of backup protection.

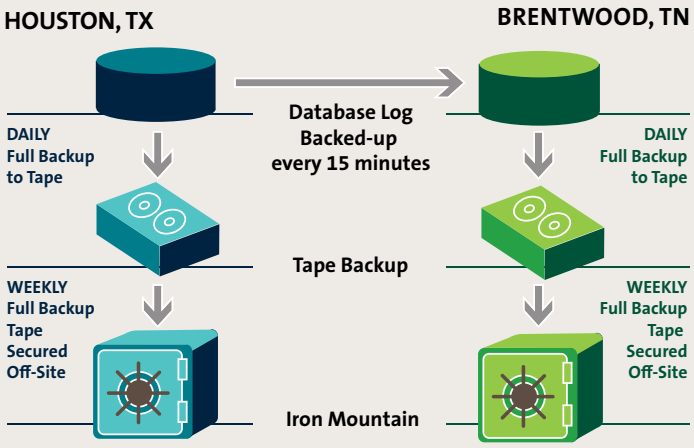
In the Event of Close of Business due to Force Majeure (Natural Disaster)

We have structured our computing resources across our two main locations in Tennessee and Texas. In the event of a truly catastrophic disaster or complete loss of our main Texas data center facility, we maintain adequate computing and network resources in Tennessee to restore our systems for customer use within four hours.

A Proven Data Backup Strategy

UL uses Snapshot and Snapmirror approaches that allow near real-time syncs, every 15 minutes, of the database. Both the Snapshot and Snapmirror are independently maintained from a historical perspective, so data can be recovered if database corruption occurred. Here are other key highlights:

- Every hour the live database is Snapshot, then a Snapmirror is run of that Snapshot to the Brentwood, TN data center. From start to finish, the process takes about 4 minutes.
- Every 15 minutes the transaction logs database is Snapshot for the live database, then a Snapmirror is run of that Snapshot to the Brentwood, TN data center. From start to finish, the process takes about 1 minute.
- Each Snapmirror is retained for 24 hours on disk. In addition, tape backups are run daily to archive those Snapmirrors to tape for a longer archive (one month). Tapes are stored offsite.
- If the main live database was to become corrupt and was not caught before the next Snapshot and Snapmirror occurred, the Snapshot and the Snapmirror would corrupt. However, this scenario is not fatal because each Snapshot and Snapmirror is kept and independently stored for the previous 24 hours on disk and even longer on tape.
- Data would simply be recovered from the Snapmirror prior to the corruption and the database would be restored to the 15 minutes before the corruption occurred by playing the transaction logs forward.



Reliability and Backup

All key networking components – routers, firewalls, web servers, database servers and data arrays – include six layers of redundancy to remove single points of failure.

Data is backed up daily and stored onsite in a fire-resistant vault. Weekly backups are stored offsite, also in a fire-resistant vault.

T: 609.627.5300 | W: uleduneering.com | 202 Carnegie Center, Suite 301, Princeton, NJ 08540