

LSUHSC-NO
Department of Information Technology
Disaster Recovery Plan
Backup Procedures
(DRP2110)

Last update: 6/7/2022 7:53 AM

If data loss or corruption were never to be expected, then there would be less need for the care and concern that is taken with the production and storage of backup copies of our electronic data.

As an additional layer of protection, in May of 2017, LSU Health New Orleans started using encryption on our backup machines. The encryption key was copied to USB flash drives and provided to those listed below. USB flash drives containing the encryption key were attached to lanyards and located within the back doors of the Spectra T950 machines at the RCB and DPS data centers.

1. Ken Boe
2. David Browning
3. Help Desk

Additional information concerning encryption, including the password for the accessing the encryption key, is kept in the Disaster Recovery documentation folders, on a separate USB key. This USB key also contains recovery software and documentation.

We have 2 on-site and 2 off-site storage locations for our backup tapes. For the servers located at the DPS facility in Baton Rouge, the on-site storage is in the secure server room at DPS, and the off-site storage facility is the RCB computer room in New Orleans. For the servers located in the RCB computer room, the on-site storage is in the secure server room at the RCB, and the off-site facility is the MEB.

The off-site storage location in the MEB, 1900 Perdido Street, New Orleans, La, is a secure interior room on the second floor of a strongly built building where there is a high probability that the media will survive in the event a disaster strikes the RCB. However, the location does have the disadvantage that it is located within a short distance of the RCB. If a catastrophic flood occurs, and RCB building access is prevented for days, then access to the MEB will also likely be prevented. In that scenario, we would not have timely access to copies of data that may be needed in a restoration process. For other sorts of disasters, this site provides a no cost, easily accessed, storage location. Since as of this time IT has no budget for disaster recovery needs, LSUHSC-NO is taking the risk of lack of accessibility to our backup media in one of the most catastrophic, but rarely occurring, scenarios.

The off-site storage location in the RCB, is the computer room of computer services. It is a secure room on the 7th floor, where there is a high probability that the media will survive if a disaster strikes the RCB. The facility is approximately 90 miles from the DPS data center, increasing the probability that a disaster affecting one site, will not affect the other site. In the event of a disaster, tapes can be recovered from the RCB, and relocated to the new recover center, possibly the RCB itself. This site provides a no cost, easily accessed storage location.

Systems operated by Enterprise IT are backed up regularly and multiple sets of backups exist at any one time. In all cases a copy of the most recent backup is stored in the data center in which the backup was produced. Once a month, a "FULL" backup is run, and then a second copy of that data is produced. The original copy stays in the original data center. The second copy for DPS backups is sent to the computer room in the RCB, while the second set of data for RCB backups are sent to the MEB. The MEB also serves as the storage location for electronic media containing archived data.

As new backups are made, the tapes are rotated, on Fridays, to the RCB/MEB off-site locations. The backup procedures and offsite tape rotation plans for individual computer systems differ. In general, full disk or file level backups are taken in each cycle. Some systems support incremental backups, and these are typically run daily. And in some instances, there are additional application-level backups for a system that may be run on custom schedules.

In addition to normal tape backups, for a few applications, some databases and/or data files are replicated from SANS and disk storage at the DPS data center to SANS and disk storage at the RCB data center on various regular schedules throughout the day.

At the DPS facility, 2 years of "FULL" backup data are kept on-site. Any data over 2 years, are brought to the RCB, and stored in the RCB computer room. At the RCB, "FULL" backups are kept for up to 7 years, before being moved to the MEB off-site storage area.

The techniques for backup and recovery used in this plan do **NOT** guarantee zero data loss. LSUHSC-NO is assuming a risk of data loss following a disaster situation.

Included in this plan are documents which describe in detail the regular backup procedures and cycles for each of the computer platforms.