

Disaster Recovery

Typical/sample questions

- Provide an overview of your disaster recovery plan.
- Define the different aspects of your solution which are redundant.
- What is the standard frequency of testing for a client business continuity plan?

Response

The LiveOps solution is designed with no single points of failure in its data center architecture. Redundancy is implemented on a component level across network devices and multiple pools of servers.

LiveOps leases data center space in two facilities, one located in New York and the other in Las Vegas. Each LiveOps data center minimally employs redundant:

- Power generation, N+1 power and cooling
- Active-active data center strategies for telephony circuits within and across carriers as well as internet circuits with diverse carriers

Power Generation

Power generation redundancy is built into each of our co-location facilities:

- Generators are fed from at least 3000 gallon fuel tanks, run time of at least 24 hours at full electrical load
- Regular generator and load switching tests are performed by our providers at each facility
- Hosting providers have multiple emergency, on-call fuel delivery contracts in place that guarantee delivery of fuel generators in case of emergency

Data Center Strategy

LiveOps maintains an active-active data centers strategy meaning that both centers are capable of routing calls with automated failover through route plans and carrier advanced features. LiveOps has deployed F5's Global Traffic Manager (GTM) for application resiliency. With GTM we ensure optimal reliability and fast application failover between our data centers. We also ensure that all users are sent to a site that is available and provides the best response time. All web, chat and reporting traffic is controlled via this mechanism. In the case of a failure, any traffic destined for the failed facility is redirected to the surviving site automatically. This mechanism is also exercised regularly during planned maintenance activities. Regular capacity reviews are conducted to ensure sufficient available capacity to operate in the event of a site failure.

Copies of all transaction and configuration data are stored across locations. New information is moved in near real time using database replication technology. Tape backups are also stored off-site in contracted secure disaster resistant facilities. Testing of data restoration is conducted periodically.

Telephony Redundancy

Telephony redundancy across data centers is achieved through route plans and carrier advanced features which support alternate destination routing. Customers who opt to implement these plans achieve automated geographic diversity of call traffic as calls are routed to multiple locations, circuits, and trunk

groups. Route plans and carrier features provide real time failover of calls in the event of full or unavailable circuits and ensure delivery of calls across locations. These route plans are actively used to spread calls between both data centers ensuring that all functionality is continuously available. Failover functions are exercised frequently by removing circuits or sections of the telephony infrastructure from production during managed maintenance periods. Regular capacity reviews are conducted to ensure sufficient capacity per carrier to recover from any circuit or data center failure.

[Revisions required](#)

[See also: business continuity, data center](#)

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