

Oracle NetSuite offers cloud-based solutions that are designed to be available 24x7 in data centers around the globe. The service allows customers to access their data and information from anywhere on the Internet. If the service becomes unavailable at one of the data centers, operations engineering teams will follow the corresponding Cloud Event Response and Recovery Plan based on the nature of the event. Each of these plans are designed to ensure reasonable, minimal disruption to customer business operations.

Key benefits

- Proven and practiced Cloud Event Response and Recovery Plans designed to minimize business disruption.
- Actions prioritized based on the type and severity of an outage for a timely and appropriate response.
- Designated recovery data centers keep data for each customer account up-to-date and geographically close.
- Cloud Operations supported by Global Cloud Event Response and Engineering Communications teams.

Data Center Design, Geography, and Architecture

NetSuite operates data centers to keep customer data in geographically relevant regions. Every account has a designated recovery data center. The data for each customer account is continuously replicated to their corresponding recovery data center. Each recovery data center is equipped with storage capacity to accommodate the customer data designated for replication into that location and has compute capacity to service the corresponding customer accounts.

Overriding Disaster Recovery Practice

Senior Cloud Operations leadership determines whether an event or outage constitutes a disaster requiring activation of a Disaster Recovery (DR) plan. The primary factors are the nature of the incident, the expected resolution time, and the disruptive consequences of executing the plan. Note that software defects, despite their severity, do not qualify for disaster recovery treatment because we run the same code everywhere, and therefore switching to a different data center or hardware will not resolve the impact.

NetSuite provides two disaster recovery options:

- Standard Disaster Recovery. Included by default for all accounts, this provides inherent resiliency, even in disaster scenarios, with a recovery time objective (RTO) of 12 hours, and a recovery point objective (RPO) of 1 hour.
- Premium Disaster Recovery. Available as an additional option, this is designed to reduce the time it takes to recover the service after a disaster-level event. This option maintains a near-continuously synced backup in a geographically remote region, running on a production grade database, allowing NetSuite to failover quickly and minimize operational disruption, with an industry-leading recovery time objective (RTO) of 1 hour, and recovery point objective (RPO) of 5 minutes.

Semi-annual DR exercises serve to ensure that systems and processes are in place, as well as to assess and enhance the competency of all personnel key to the successful implementation of DR activities. Archival backups support customer-initiated data restores for 60 days.

Post Disaster Recovery Cleanup Procedure

After a DR plan has been carried out in a region, the region will operate without the DR capability until the impacted data center has been fully restored to use. At that point, the decision to fail back over to the original data center will be made by senior Cloud Operations leadership and coordinated with customers through traditional support and account management channels.

Classification of Service Disrupting Events

- Limited. A component (e.g. database) or component host crash that causes a temporary service disruption (downtime) for a small set of customers which will trigger an appropriate recovery within the same data center. This type of event represents the majority of customer downtime for the NetSuite service. Cloud Operations engineers will follow standard procedures based on the nature of the event. These procedures are documented in the form of playbooks and service/host manuals, which are executed frequently and with minimal service disruption.
- Partial. An event that causes unavailability of the service
 (or a part of the service) for a subset of customer accounts
 in one or more data centers but does not impact the
 database service or customer logins, which will trigger
 an appropriate recovery within the same data center.
 This type of event is infrequent within NetSuite. Cloud
 Operations engineers will follow standard procedures
 based on the nature of event. These procedures are
 documented in the form of playbooks and service/host
 manuals, which are practiced annually.

- Regional. An event that causes temporary service unavailability to all customer accounts hosted in one data center such as an unplanned power outage. Events of this type trigger a senior Cloud Operations leadership decision to recover and restore failed services, either in place, or to the geographically allocated recovery data center, depending on the nature of the event and its expected resolution time in the primary data center. This type of event is uncommon but has a greater impact. Cloud Operations engineers will work with a Global Cloud Event Response team and an Engineering Communications team to follow an Oracle corporate-level playbook for service disruption communications for the duration of the event.
- Catastrophic. An event that causes prolonged service unavailability for all NetSuite customers in a single data center such as earthquakes, floods, acts of terrorism, and other malicious acts. Events of this type trigger a decision by senior Cloud Operations leadership to restore service for the impacted data center to the geographically allocated recovery data center. This type of event is highly unlikely. Cloud Operations engineers will work with a Global Cloud Event Response team and an Engineering Communications team to follow an Oracle corporate-level playbook for service disruption communications for the duration of the event.





