

# Disaster Recovery with IBM Cloud Virtual Servers



## Phase 4

### Development Part 2

Once you have identified the data and applications that need to be protected in your disaster recovery plan, you need to configure replication to copy them to the recovery site.

**Synchronous replication:** This type of replication copies data to the recovery site in real time, with no data loss. Synchronous replication is the most expensive and complex replication technology, but it provides the highest level of protection.

Once you have chosen a replication technology, you need to configure it to replicate the data and applications that you need to protect. This process will vary depending on the specific replication technology that you are using.

## Testing Recovery Procedures

- The ability to fail over to the recovery site: Failover is the process of switching operations from the protected site to the recovery site. You need to test your failover procedures to ensure that they can be executed quickly and smoothly.
- The ability to restore data and applications: Once you have failed to reach the recovery site, you need to be able to restore your data and applications. You need to test your restore procedures to ensure that they can be executed quickly and completely.
- The ability to return to normal operations: Once your data and applications have been restored, you need to be able

to return to normal operations. You need to test your return-to-operations procedures to ensure that they can be executed quickly and smoothly.

You should test your recovery procedures on a regular basis to ensure that they continue to work as expected.



IBM Cloud Replication Services

IBM Cloud Replication Services is a fully managed replication service that provides continuous data protection for your on-premises workloads. It can replicate data to IBM Cloud Virtual Servers, IBM Cloud Object Storage, or IBM Cloud Block Storage

To use IBM Cloud Replication Services, you will need to

1. Create an IBM Cloud account and enable the IBM Cloud Replication Services service.
2. Install the IBM Cloud Replication Services agent on your on-premises servers.
3. Configure the IBM Cloud Replication Services agent to replicate your data to IBM Cloud Virtual Servers.
4. Start the replication process.

Once the replication process has started, IBM Cloud Replication Services will continuously replicate your data to IBM Cloud Virtual Servers. In the event of a disaster, you can fail over to your IBM Cloud Virtual Servers to ensure that your applications remain up and running.

To conduct recovery tests to ensure that your disaster recovery plan works as intended, you should simulate a disaster scenario and practice recovery procedures. This will help you to identify any gaps in your plan and make necessary adjustments.

Choose a disaster scenario: Choose a disaster scenario that is relevant to your organization and that is likely to have a significant impact on your operations. Some examples of disaster scenarios include:

- Fire
- Flood
- Earthquake
- Tornado
- Cyberattack

1. Simulate the disaster scenario: Once you have chosen a disaster scenario, simulate it as realistically as possible. This may involve shutting down your on-premises systems and infrastructure, or it may involve using a test environment.
2. Practice recovery procedures: Once the disaster scenario has been simulated, practice your recovery procedures. This will help you to identify any areas where your plan needs to be improved.
3. Evaluate the results: Once you have completed the recovery test, evaluate the results and make any necessary adjustments to your disaster recovery plan.

It is important to conduct recovery tests on a regular basis to ensure that your disaster recovery plan remains up-to-date and effective

# conducting recovery tests

- **Involve all stakeholders:** Involve all stakeholders in the recovery test, including IT staff, business users, and senior management. This will help to ensure that everyone is aware of their role and responsibilities in the event of a disaster.
- **Test all aspects of your disaster recovery plan:** Test all aspects of your disaster recovery plan, including failover procedures, data restoration procedures, and return-to-operations procedures.
- **Be realistic:** Be as realistic as possible when simulating the disaster scenario. This will help you to identify any potential problems that you may not have considered.
- **Make adjustments to your disaster recovery plan as needed:** Once you have completed the recovery test, make any necessary adjustments to your disaster recovery plan.