

# Hybrid Cloud Cloud Disaster Recovery

A highly robust and flexible disaster recovery environment for your IT infrastructure on the cloud

## Introduction




The IT infrastructure landscape has evolved so rapidly and extensively that it has dramatically altered the way organizations store, host and manage their data and applications. Traditional on-premise infrastructure is no longer the approach organizations take to their IT infrastructure. They prefer a customized solution that fits their specific needs.

Hybrid Cloud has emerged as a tailor made approach, which lets the organization choose the set of data and applications they want to host and manage on the public cloud and those that they prefer to keep safe on-premise. Hybrid Cloud offers the best of both cloud models, public and private, to deliver agile, elastic, cost-effective and secure infrastructure for the organization.

## Background

Alibaba Cloud Hybrid solutions offer a disaster recovery (DR) scenario called 'warm standby,' which acts as an extension of the organization's on-premise environment. During warm standby, a mirror environment offers a scaled-down version of a fully functional environment that remains running in the cloud. This minimizes the recovery time and enables mission critical systems to meet stringent RTO (Recovery Time Objective) and RPO (Recovery Point Objective) targets.

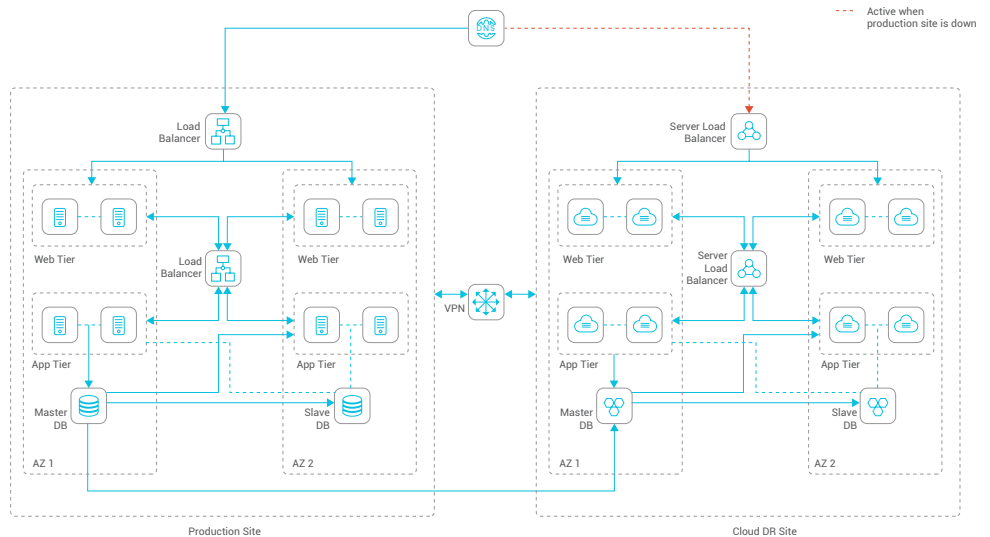
## Highlights

-  Business continuity
-  Disaster recovery site
-  Auto Scaling as per requirements

## Benefits

- ✓ Minimized recovery time
- ✓ Flexible architecture for different needs
- ✓ Highly available and robust network

## Recommended Solution Architecture



Embedded in this architecture is the production site and a common disaster recovery (DR) scenario called 'warm standby' or 'Cloud DR Site'; which are connected via a Virtual Private Network (VPN). The warm standby is a scaled-down version of a fully functional environment that is always running in the cloud as a mirror environment and minimizes recovery time.

The servers in warm standby run on a minimum-sized cluster of Alibaba Cloud ECS instances, and despite lacking scaling to take a full production load, the DR environment is completely functional.

In case of production system failure, the architecture scales up the standby environment for production load, and the DNS records change to route all traffic to Alibaba Cloud. It achieves this by adding more instances to the load balancer manually or via Auto Scaling, and by resizing the small capacity servers to run on larger ECS instance types.