

Huawei Business Continuity and Disaster Recovery Solution



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Great Challenges to Business Continuity and Disaster Recovery

How can a disaster recovery system cope with complex services and ensure 24/7 ongoing services?



- How can a disaster recovery system ensure business continuity to the maximum and make zero service interruption and zero data loss available?
- How can the impact on production services be reduced to the minimum and how can service performance experience be ensured?
- How can data consistency and integrity of complex services be ensured?

How can the return on investment (ROI) be increased?



- How can the ROI be increased in a situation of low disaster recovery device utilization?
- How can resources in a disaster recovery center be better shared to reduce the total cost of ownership (TCO)?
- How can disaster recovery data be effectively used to create added values?

How can disaster recovery management be simplified?



- How can enterprises operate disaster recovery services efficiently when manpower is insufficient?
- Disaster recovery construction involves a series of processes including service analysis, risk analysis, solution design, implementation, and rehearsal. How can a suitable disaster recovery system be quickly constructed.

Huawei Business Continuity and Disaster Recovery Solution

Huawei provides the end-to-end Business Continuity and Disaster Recovery Solution to ensure continuity, recoverability, and availability of data accesses, protect production systems against irrecoverable damage due to various natural and man-made disasters, and deliver world-class disaster recovery services.

Planning

Evaluate IT system risks and disaster recovery capabilities using Reliability Analysis (RA) and Business Impact Analysis (BIA).

Design

Take technical costs into consideration based on the planning, put forward a disaster recovery design, and offer suggestions on the disaster recovery plan (DRP).

Implementation

Deploy a disaster recovery system and migrate services from the production system to the disaster recovery system.

0&M

Perform routine maintenance including replication status monitoring, disaster recovery performance monitoring, periodic DRP drill, and DRP design optimization.

Application Scenarios

One data center



HA Solution: High availability (HA) is available for services in a single data center, preventing the failure of a single component from causing service interruptions.

Two data centers

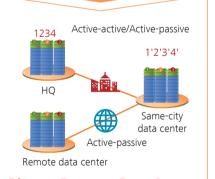


Disaster Recovery Data Center Solution (Active-Passive Mode): It applies to same-city and remote disaster recovery and ensures that services can be quickly recovered and provided if a disaster occurs.

Disaster Recovery Data Center Solution (Active-Active Mode):

It applies to same-city disaster recovery. Services are evenly allocated to the production center and disaster recovery center. Both data centers provide services concurrently.

Three data centers



Disaster Recovery Data Center Solution (Geo-Redundant

Mode): It applies to samecity active-active/active-passive disaster recovery and remote active-passive disaster recovery and ensures higher business continuity.

Highlights

Stable

Stable architecture: Activeactive disaster recovery at six layers including storage, computing, applications, networks, security, and transmission

Stable services: active-active applications, non-stop services, and zero data loss

Simple

Easy construction: one-stop consultation, design, delivery, and drill

Convenient O&M: visualized management, doubling efficiency

Optimal

Cost effectiveness: resource reuse and heterogeneous disaster recovery, reducing costs by 40%

Excellent performance:

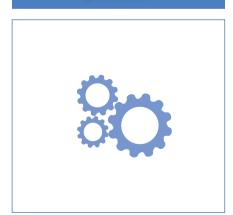
protocol optimization, improving service performance by 30%

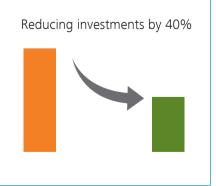
Consistent data: data consistency assurance for databases and files

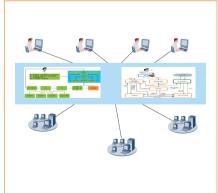
Customer benefits

Service continuity protection Enterprise reputation protection

High resource utilization Optimal cost effectiveness Unified and visualized monitoring Easy disaster recovery management







Huawei Helps Spain's Candelaria Hospital Build a 24/7 Online System

Customer Requirements

- Open-E is installed on the application server to implement data dual-write to the two storage devices in the live network. As a result, the performance is decreased by about 50% and services are greatly affected.
- A disaster recovery (DR) center needs to be build for the hospital service system to ensure secure data storage and protection and meet the 24/7 service continuity requirement of the hospital information system.

Huawei Solution

- Based on Huawei cloud computing and servers, a virtualization platform is built and DR architecture is constructed at the computing layer to implement redundancy protection on service servers.
- Active-active + cloud computing cluster: Active-active at the storage layer is implemented by VIS. Data is synchronously written to the storage of two equipment rooms to implement image redundancy of service system data. Active-active at the computing layer is implemented by the FusionSphere cluster. When the DC is faulty, FusionSphere can perform automatic switchovers.

Customer Benefits

- Resource usage improvement: Based on the server virtualization and Huawei cloud platform, the resource usage is improved.
- High performance: By implementing data dual-write at the storage layer using VIS, the performance decrease problem due to the live network Open-E is resolved and the service system performance is enhanced.
- Secure and reliable data protection: Active-active architecture is built between the active and standby equipment rooms to ensure data security and service continuity when any equipment room is faulty.

Huawei DR Solution Safeguards the Saudi Electricity Co. (SEC) OSS System

Customer Requirements

- To protect core service data, a complete backup system must be constructed.
- To improve reliability of the database service system, storage single-point problems must be resolved.
- To meet the requirements for service continuity, a scalable and maintainable intra-city active-passive DR system needs to be built.

Huawei Solution

- The Huawei Simpana+VTL6900 local centralized backup system is deployed to provide data protection for database and file production systems.
- On the production site, the four-node VIS6600T mirroring function is used to build two high-end storage OceanStor 18500 local HA systems.
- OceanStor 18500 is deployed to build a remote active-passive DR system in the remote replication way and ReplicaionDirector is deployed to provide visual DR system management.

Customer Benefits

- The professional backup system meets the enterprise's backup requirements in the future three to five years and provides strong data security protection.
- The two-node dual-array local HA of the core service system is implemented. The RPO is 0 and the RTO is 0.
- Visual active-passive DR management simplifies maintenance and improves efficiency by three times.

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