

Multi-Site High Availability Service

FAQs

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1 MAS FAQs

[1.1 Is MAS a Product or Solution?](#)

[1.2 Does MAS Synchronize Data in Addition to Controlling Access from Applications to Databases?](#)

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[1.4 What Is the Automatic Switchover Mechanism? How Does MAS Implement Switchovers in Seconds?](#)

1.1 Is MAS a Product or Solution?

Multi-Site High Availability Service (MAS) is a complete solution that provides applications with multi-active high availability (HA).

MAS = Multi-active access + Application layer SDKs + Data synchronization channels + Unified management and control center

Implementable solution = MAS + Consulting + Ecosystem partners + Disaster recovery (DR) specifications

1.2 Does MAS Synchronize Data in Addition to Controlling Access from Applications to Databases?

No. MAS deals with the entire management plane. MAS instances initiate a switchover based on arbitration and availability detection.

Data synchronization channels are provided in the end-to-end (E2E) multi-cloud multi-active solution and integrated with those of other Huawei Cloud services. It is recommended that each service have a dedicated data synchronization channel.

If some services cannot provide one, third-party open-source tools and temporary solutions will be used instead to ensure the integrity of the multi-active DR solution.

1.3 Is MAS Like a Management Channel for Which I Need to Configure Automatic Switchover Policies?

Yes.

You need to configure databases and storage for MAS.

It also provides DR policies and drills. The automatic switchover is imperceptible.

1.4 What Is the Automatic Switchover Mechanism? How Does MAS Implement Switchovers in Seconds?

You can configure an automatic switchover mechanism that meets your service requirements.

In the multi-active DR solution, MAS automatically monitors the entry of API Gateway for dynamic DNS switchover.

2 Multi-Active DR Solution FAQs

- [2.1 In the Single- or Dual-Instance Data Layer Architecture \(Same Region, Multi-AZ, Traffic Distribution with API Gateway\), Which Components Are Provided by MAS and Which Ones Should I Prepare?](#)
- [2.2 Can I Implement the Active-Active Solution on Any Other Services in Addition to Self-Built Cloud Services?](#)
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- [2.7 How Do I Configure Monitoring for Multi-AZ Deployment in the Same Region?](#)
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2.1 In the Single- or Dual-Instance Data Layer Architecture (Same Region, Multi-AZ, Traffic Distribution with API Gateway), Which Components Are Provided by MAS and Which Ones Should I Prepare?

APIG Site, MAS (DB Monitor and DC Monitor), MAS SDK, and Data Replication Service (DRS, for data synchronization with other cloud vendors) are provided by Huawei. You need to deploy Elastic Load Balance (ELB) and Content Delivery Network (CDN).

2.2 Can I Implement the Active-Active Solution on Any Other Services in Addition to Self-Built Cloud Services?

Yes. In addition to self-built cloud services, you can also implement this solution on third-party services, such as Redis and MySQL.

2.3 How Do I Implement Database Dual-Write?

Data synchronization is implemented using DRS. Services are integrated with a MAS SDK to synchronize data between the two databases.

2.4 Does the Multi-Active Architecture Have Any Requirements on My Services?

Yes. Your services need to be reconstructed at the application layer. We will provide you with DR specifications, guidance, and consulting.

2.5 What Are the RPO and RTO of the Multi-Active DR Solution?

- Cold backup
RPO/RTO: minutes, hours or days, respectively
- Active/Standby redundancy
RPO/RTO/Availability: minutes, hours, and 99.9%, respectively
- Active-active redundancy
RPO/RTO/Availability: 0, seconds, and 99.99%, respectively
- Multi-site multi-active redundancy
RPO/RTO/Availability: seconds, minutes, and 99.995%, respectively

2.6 Does the Multi-Active DR Solution Have Any Network Requirements? Will Incorrect Switchover Occur If the Network is Unstable or Jitters?

Yes. The solution has some network requirements (such as 5 ms latency), which are described in the DR specifications.

You can configure application and database availability detection policies. For example, if the network condition is poor, you can configure the database to switch over if an error occurs for 3 consecutive times at an interval of 10s. After a switchover, you need to manually switch back on the console.

2.7 How Do I Configure Monitoring for Multi-AZ Deployment in the Same Region?

The monitoring configuration on the MAS console takes effect in all AZs of the solution.

2.8 Will MAS and API Gateway Be Deployed on Both Huawei Cloud and Our Cloud?

Yes. We use the APiG-Site deployment mode. In this mode, the management plane is deployed on Huawei Cloud, and the data plane is deployed on resource servers of your cloud using Huawei Cloud Intelligent EdgeFabric (IEF).

3 MAS Usage FAQs

- [3.1 Why Does the Function Module Fail to Be Deleted?](#)
- [3.2 Can I Change the Namespace Bound to an Instance?](#)
- [3.3 Why Is the Created Instance in the Failed State?](#)
- [3.4 What Can I Do If a Newly Created MySQL Monitor Is Abnormal?](#)
- [3.5 What Can I Do If the Synchronization Link Is Abnormal?](#)

3.1 Why Does the Function Module Fail to Be Deleted?

If an enabled function module has dependent namespaces, the module cannot be deleted. On a namespace card, choose **Operation** > **Modify**, deselect the features, and then deselect the features on the **Modify Module** page.

3.2 Can I Change the Namespace Bound to an Instance?

Yes. However, you can only select a namespace that is of the same type and has the matched multi-active area type, region, and AZ.

3.3 Why Is the Created Instance in the Failed State?

Possible messages and reasons:

- the added number of cpu [1] above left profit [0]: CPU cores are used up.
- Flavor c3.medium.4 is abandoned: No c3.medium.4 flavor is available in the selected AZ.
- the volumeType[SATA] is sellout in az[xx-xx-xx]: No VM resources are available in the AZ.

Delete unnecessary resources and instances or increase quotas by referring to [How Do I Increase a Quota?](#)

3.4 What Can I Do If a Newly Created MySQL Monitor Is Abnormal?

1. Confirm or reconfigure the database information, for example, usernames, passwords, IPs, ports, and database names.
2. Confirm that the database instances can be started and run properly.
3. Confirm that the database to be monitored has been set.
4. Confirm that the database instances are connected to MAS. The Relational Database Service (RDS) instances should be in the same VPC and security group as the MAS instance, or should be bound to an Elastic IP (EIP).

3.5 What Can I Do If the Synchronization Link Is Abnormal?

1. Confirm the data source information, for example, connection address, database name, username, and password.
2. Confirm that the database instances can be started and run properly.
3. Confirm that there is no database in the target data source.