

Cloud Migration

Data Collector

Product Documentation



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Contents

Data Collector

- AWS Online Research

- AWS Tool Research

- AWS Billing Import Tool

- IDC Tool Research

- IDC File Import Research

Data Collector

AWS Online Research

Last updated: 2025-09-03 16:18:18

This document describes how to perform online research on AWS key pair resources. This method involves creating an AWS user and granting read-only permission to relevant resources, enabling quick completion of information research on multiple cloud resources using the user's key pair. **This operation guide is for reference only and aims to provide users with a clear guide. Some materials originate from external public information, and specifics are subject to the relevant pages of third parties.**

Note:

This research method performs read-only research on instance specifications and other attributes of other cloud resources. Users can disable the related key by the following steps after the research:

1. Log in to the AWS Console, go to IAM > Users > click the corresponding user > [Security Credentials](#).
2. In the access key section, delete the key.

Not currently supported: Resource research for Amazon Web Services China (Beijing) region and Amazon Web Services China (Ningxia) region.

Step 1: Create an AWS User and Read-Only Permission Key

Note:

If you are logging in with an AWS sub-account, the sub-account needs to have IAMFullAccess permission.

1. Log in to the AWS official website and enter [AWS Security Credentials](#).
2. Enter [User](#) in the left menu and click **Create User**. When setting permission, select direct attachment policy. The permission requirements are as follows:

Research Resource	Necessary Permissions
VPC	AmazonVPCReadOnlyAccess
EC2	AmazonEC2ReadOnlyAccess
S3	AmazonS3ReadOnlyAccess
EFS	AmazonElasticFileSystemReadOnlyAccess

Aurora and RDS (MySQL, PostgreSQL, SQL Server)	AmazonRDSReadOnlyAccess
Amazon OpenSearch Service	AmazonOpenSearchServiceReadOnlyAccess
ElastiCache (Redis)	AmazonElastiCacheReadOnlyAccess

3. After creation, click **username** to enter details page, create access key in security credential and download to save.

Step 2: Execute Online Research

Enter the [Cloud Migration console](#), select **origin server collection > AWS > online research**, input the AWS key, select the research region and product scope, then click **start research**.

2 Key Authorization

AccessKey *

SecretKey *

Research Region * Asia Pacific - Others

Product Selection

- All
- EC2
- AmazonEBS
- S3
- Amazon EFS
- Aurora and RDS(MySQL, PostgreSQL, SQL Server)
- ElastiCache(Redis)
- VPC
- Amazon OpenSearch Service

I authorize and allow Cloud Migration to access the results of this research

I have read and agree to [Cloud Migration Service Agreement](#)

[Start Research](#)

Step 3: View Research Results

After the research is completed, click **Import resource list** to save the survey result, and enter **Source-end resource list** to view detailed resource data.

If you click **Cancel Import**, the survey result of this time will be cleared, and you can try again.

3 View Result

Research Progress

Processing completed 100%

• Succeeded in researching 36 pieces of data, among which ec2 (ebs already associated with corresponding server) 2, s3 20, efs 6, vpc 8

[Import resource list](#) [Cancel Import](#)

AWS Tool Research

Last updated: 2025-09-03 16:19:04

This document describes how to collect origin server resources from AWS international website using the Offline Collection Tool. **This operation guide is for reference only, providing users with a clear guide. Some materials come from third-party public information. For specific details, refer to the relevant pages of the third party.**

Note:

If the cloud resource region is outside Mainland China, download the Offline Collection Tool to nodes outside the Chinese mainland and scan them. This can reduce API call failures caused by network issues.

Preparations

1. Confirm the region where the resource is located, such as cn-shanghai and cn-beijing, based on the actual circumstances of the source.
2. Obtain cloud resource access keys (AccessKeyID and AccessKeySecret);
3. Clarify the tool's runtime environment. The Offline Collection Tool needs to be installed and run on servers with network connectivity from the Internet to enable relevant API calls for resource collection. The tool requires at least a 2-core 4G machine specification, with mainstream Linux distribution (CentOS7 recommended) or MacOS system as the operating system requirements.

Note:

The MacOS system requires security authorization for the file. Path: System Preferences > Privacy and Security.

Step 1: Obtain the Offline Collection Tool

You can download locally and upload to the deployable server to execute, or directly download and unzip by command on the server:

```
wget https://msp-release-1258344699.cos.ap-shanghai.myqcloud.com/package/urp/aws-scanner-linux-1.0.0.tar.gz
tar -xzvf aws-scanner-linux-1.0.0.tar.gz
```

The directory structure after decompressing is as follows:

```
mspcli
├─ README.txt # Tool instructions file
├─ config.yaml # Parameter configuration file
└─ aws-scanner # Collection agent file
```

Step 2: Configure the Parameter File

Write the access key, region, and research product information to the config.yaml file. You can prepare multiple parameter files in advance, but only the configuration file located at the same directory level as aws-scanner and named config.yaml will take effect.

```
# SecretId
SecretId: ****

# SecretKey
SecretKey: ****

# Region to be scanned, multiple regions are separated by commas. region
can be not specified, and all regions of the current product will be
automatically obtained for scanning.
# List of region names:
https://docs.aws.amazon.com/zh\_cn/AWSEC2/latest/UserGuide/using-regions-availability-zones.html#concepts-available-regions
Regions:

# Multiple products are separated by commas. Product support: do not
fill in, and automatically obtain all products for scanning.
#   apigateway,cloudfront, dynamodb, ec2, ecr, efs, eks, elasticache,
#   elb, emr, es, kafka, mq, s3, sns, vpc, vpn, rds
Products: ec2
```

Note:

- Fill in the correct key information. The key will only be used to verify during API calls and will not be saved by the tool.
- Enter a space after the configuration item colon, then input the corresponding value. Multiple values should be separated by commas.
- Regions and Products configuration items can be empty. At this time, all regions and scannable products will be scanned by default.
- The configuration file needs to be in the same-level directory as the scanning program (for example, aws-scanner).

Step 3: Executing the Offline Tool for Collection

Run `aws-scanner` to collect data. The execution command and result are as follows:

```
# Authorize the tool
chmod +x aws-scanner
# startup command
./aws-scanner
#console output
Switched to the directory of the executable file: /home/ec2-user
load configuration file: config.yaml
Generating research configuration in progress...
Generate research configuration for product ec2
Research configuration generation completed.
Start researching cloud resources
Resource research completed. Product: ec2. Region: ap-southeast-1.
Number of scanned resources: 1.
Resource list exported successfully: aws_scan_20241008084938.xlsx
```

Note:

When the platform is MacOS, please go to: **System Preferences > Privacy and Security > Security**. Under the "xxx has been blocked to protect MacOS" notification, select "Open Anyway" to authorize the file.

Step 4: View Result File

Collection completed will generate the following files in the same directory:

```
mspcli
├─ ReadMe.txt          # Tool instructions file
config.yaml          # Parameter configuration file
├─ aws-scanner        # Collection program file
aws_scan_20241008084938.xlsx      # Scanning result data
├─ generate_scan_config_log.json    # Configuration file reading log
├─ mspcli.log         # Execution log
```

Step 5: Upload Result File

Enter Cloud Migration console > Origin Server Collection > AWS Tool Research > Upload Tool File Parsing, upload the result file in .xlsx format (such as `aws_scan_20241008084938.xlsx`).

Note:

To correctly parse the data content, do not modify the result file.

3 Upload tool parses file.

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[Click to upload](#)/Drag to this area

- Intelligent Account: Data from multiple accounts do not interfere with each other after uploading
- Intelligent deduplication: deduplicate by Instance ID under the same account
- Intelligent Update: The same instance will overwrite the old one

Step 6: View Survey Results

After the file is parsed, click to go to the resource list to view the imported data.

3

View Result

[Go to resource list](#)

AWS Billing Import Tool

Last updated: 2025-09-04 11:22:29

This document describes how to research source-end resources using AWS `CSV` format bills. **This operation guide is for reference only, providing users with a clear guide. Some materials originate from third-party public information. For specifics, refer to the relevant pages of the third party.**

Step 1: Generate AWS Bill File

Log in to the AWS official website, go to [Bills and Cost Management](#) > [Data Export](#) > click **Create**. The configuration selection is as follows:

1. Export detailed information: Select **standard data export**.
2. Data table content settings: Select **CUR 2.0**.
3. Data table configuration: Check **include resource ID**.
4. Time granularity: Select **per month**.
5. SQL statement: **selected by default**. The following table lists the required items.

Column Name	Description
product	Product information
product_servicecode	Product Name
product_region_code	Region CODE
product_sku	Product SKU
product_usagetype	Product Usage Type
product_product_family	Product Family
resource_tags	Tag
product_instance_type	Product Specifications
pricing_unit	Billing unit
line_item_usage_amount	Usage
line_item_line_item_description	Billing Rule Description
line_item_usage_type	Usage Type
line_item_resource_id	product ID

6. Data export delivery options > Compression type and file format: Select **gzip – text/csv**.
7. Data export storage settings: Choose to create a new S3 bucket or select an existing bucket, and fill in the **path prefix**.

Note:

Based on the scale of bill details, generating a CSV bill file normally takes several hours.

Step 2: Download AWS Bill File

After the CSV bill file is generated, go to [Bills and Cost Management](#) > **Data Export** > click the **corresponding export name** > **Delivery and Storage Option** > **S3 destination** > click to enter the bucket. Download the `xxxxxx.csv.gz` bill file in the `data/` path of the exported folder.

Note:

Danger: Do not modify the CSV bill file. Modification may result in data parsing failure during import.

Step 3: Execute AWS Bill Research

Enter [Cloud Migration console](#), select **Collection Tools** > **AWS** > **Bill Import**, upload the `CSV` bill file.

2 Upload AWS bill

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Click to upload/Drag to this area

- Intelligent Account: Data from multiple accounts do not interfere with each other after uploading
- Intelligent deduplication: deduplicate by Instance ID under the same account
- Intelligent Update: The same instance will overwrite the old one

Step 4: View Research Results

After the bill parsing is completed, click **Go to Resource List** to view the imported data this time.

3 View Result

[Go to resource list](#)

IDC Tool Research

Last updated: 2025-08-19 17:43:16

This document describes how to install and configure the offline tool to automatically research specification information of cluster servers in IDC.

Note:

The IDC offline research tool only performs research on the specification attributes of local servers and does not read or impact business data on local servers.

Step 1: Obtain Research Tool

[Click here](#) to get the IDC offline research tool and move it to any directory. Under the tool's directory, run the following command to decompress:

```
tar -xzf agent.tar.gz
```

Step 2: Configure Server Info

1. Create `user.config` in the same directory as the tool.

```
vi user.config
```

2. Refer to the section below and configure the server information to be researched in `user.config`, with multiple servers info separated by line breaks.

```
user1:password1:host1:port1  
user2:password2:host2:port2
```

Note:

- user: Server username
- password: Password for the corresponding username.
- host: Server hostname or IP.
- port: Server port.

For example:

```
admin:secret123:192.168.1.10:22
user:password456:192.168.1.20:22
```

3. After the configuration is complete, press `Esc`, input `:wq`, and press `Enter` to save and exit.

Step 3: Execute Research Command

Enter the following command to start research:

```
./agent scan
```

Wait for the research to complete, then download the generated research file `IDC_timestamp.csv` in the same directory as the tool.

Note:

Warning: Do not modify the research file. Modification may lead to data parsing failed during import.

Step 4: Upload Research File

1. Enter [Cloud Migration console](#), go to **Source Resource Collection > IDC > Tool Research**, and upload the `IDC_timestamp.csv` file generated by the research tool.

2 Upload Tool Parsing File

Supported Scope **Server**

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IDC_20250724153555.csv

Processing completed 100%

[Upload Again](#)

- Smart Account: Data from multiple accounts will not interfere with each other after upload.
- Smart Deduplication: Deduplication based on Instance ID within the same account.
- Smart Update: The same instance will be overwritten with the new data.

Import finished, 1 data entries have been discarded due to obsolescence.

3 View Result

[Go to Resource List](#)

2. After parsing is completed, click **Go to Resource List** to view.

Note:

CMG marks the last modification time of the file with the origin server collection time for import. You can view file details to obtain the time information.

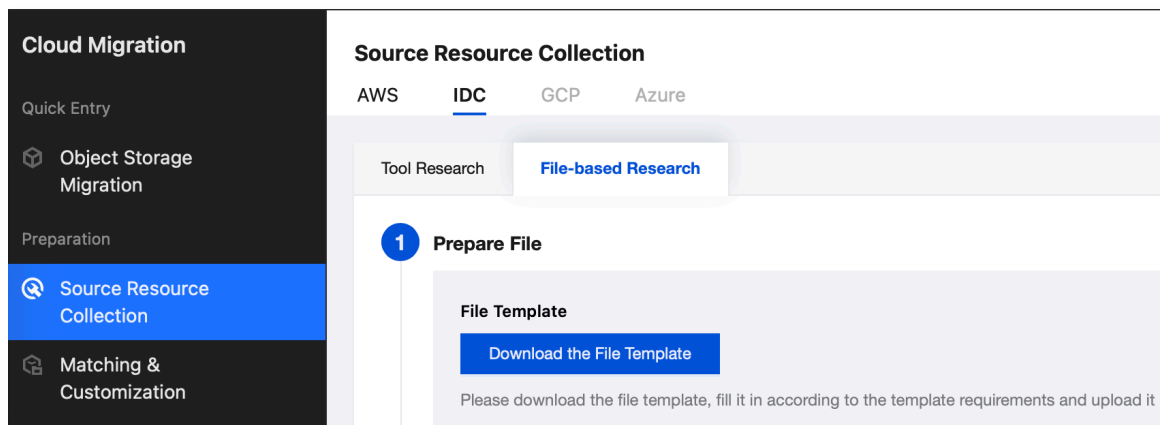
IDC File Import Research

Last updated: 2025-08-19 17:43:16

This article introduces how to pass the IDC file template to perform resource import, providing necessary source information for follow-up benchmarking.

Step 1: Download a File Template

Log in to the [Cloud Migration console](#), select **Source Resource Collection > IDC > File-based Research**, and click **Download the File Template**.



Step 2: Fill in Source Resource Information

The IDC file template currently supports research on four types of resources: **servers**, **MySQL**, **Redis** and **file storage**.

Fill in the file template according to the resource specification. The red columns are required items. Hover over cells with red indicators to view the corresponding filling instructions.

Basic Information			Specifications				Addresses			Applications		Notes
Machine Name (Unique Identifier)	Machine MAC Address	Business Tags	CPU Cores (Required)	Memory (GB) (Required)	System Disk Size (GB) (Required)	Data Disk Size (GB)	Public IP	Private IP (Required)	DNS	Operating System Kernel (Required)	Distribution Version	
Example_Machine_1	fa:16:3e:9a:f2:51	{"idc_machine":2	2	60	60,160,160		1.92.95.7	10.0.2.20	100.100.2.138	Linux		

Note:

Do not add or delete columns. Altering the table structure may result in data parsing failed.

Step 3: Upload Files Execute Research

After completing, upload the file and complete parsing. Click **Go to Resource List** to view the imported data this time.

2 Upload FileSupported Scope **Server** MySQL Redis CFS I have read and agree to [Cloud Migration Service Agreement](#)

server_template_20250716-2.xlsx

Processing completed 100%

[Upload Again](#)

- Successfully imported 4 data entries, among them redis 1 ,NAS 1 ,server 1 ,mysql 1

- Smart Account: Data from multiple accounts will not interfere with each other after upload.
- Smart Deduplication: Deduplication based on Instance ID within the same account.
- Smart Update: The same instance will be overwritten with the new data.

3 View Result[Go to Resource List](#)**Note:**

CMG uses the last modification time of the file as the origin server collection time for import. You can view file details to obtain the time information.