

HUAWEI CLOUD Hands-on lab

READ Thailand-ID Card with Huawei OCR





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Read Thailand-ID Card with HUAWEI OCR

Overview

HUAWEI CLOUD Optical Character Recognition (OCR) allows you to detect and recognize printed characters in images and convert such characters into editable text in JSON format.

OCR provides services through open application programming interfaces (APIs). You can use programming languages such as Python and Java to call OCR APIs to recognize images as text, helping you automatically collect key data and build an intelligent service system to improve service efficiency.

OCR also provides software development kits (SDKs) for multiple programming languages.

HUAWEI CLOUD has deploy OCR Service in Thailand Region and support Thailand-ID Card allows you to detect and recognizes key information such as the ID number, given name, surname, and address on Thailand-issued identity cards.

In this hands-on lab you'll learn how to use HUAWEI CLOUD OCR to recognize Thailand-ID Card then store data into Database, you will also learn how to create static website on Object Storage Service and using the API-Gateway, FunctionGraph.

Introduction:



CLIENT: workstation open up URL to upload the picture then they update query store into database service

Object Storage Service (OBS): is a cloud storage service optimized for storing massive amounts of data. It provides unlimited, secure, offers an affordable and always-available website hosting solution, with auto scaling based on site traffic and highly reliable storage capabilities at a relatively low cost

API Gateway: is a high-performance, high-availability, and high-security API hosting service that helps enterprises build, manage, and deploy Application Programming Interfaces (APIs) at any scale.

FunctionGraph: hosts and computes event-driven functions in a serverless context while ensuring high availability, high scalability, and zero maintenance

Optical Character Recognition (OCR) allows you to detect and recognize printed characters in images and convert such characters into editable text in JSON format. OCR provides services through open application programming interfaces (APIs).

RDS for MySQL is reliable, secure, scalable, inexpensive, easy to manage, and immediately ready for use. It supports various web applications and is cost-effective, preferred by small- and medium-sized enterprises with web-based console provides comprehensive monitoring information, making your operations easy and visual. You can flexibly adjust the required resources based on your service requirements and pay for only what you use.

What you'll do

Create HUAWEI OBS bucket Create AK SK with the Console Create Relational Database Server Subscribe OCR Service Create FunctionGraph with the Console Create an API-Gateway with the Console Upload static website with OBS

Prerequisites

Understand HUAWEI CLOUD Fundamental such as Virtual Private Cloud, Security Group, Elastic Cloud Server, Relational Database Service and familiarity with standard text editors such as Notepad, or Notepad++ will be helpful

Read these instructions.

This hands-on lab lets you do the lab activities in HUAWEI CLOUD environment, and quick demonstrate how to integrate relate service in CLOUD with *pre-build code and script and store website in OBS instead of create ECS and webserver, in your real production environment you need to consider setup Web server for secure website, code and script, security setup, data structure and etc.* In this hands-on you need to provision all resources in **AP-Bangkok**

What you need

To complete this lab, you need:

- Completed HUAWEI CLOUD Fundamental 101
- Time to complete the lab.

Create HUAWEI Object Storage bucket

To quick demonstrate with HUAWEI CLOUD with in this section, you'll learn how to create OBS Bucket from the Console.

Download pre-build website static code, sample data and FunctionGraph script from <u>https://tinyurl.com/y6pcwq3w</u>, and extract to your local computer e.g. C:\HOL-OCR

Open Web Browser e.g. Chrome/Firefox to access https://www.huaweicloud.com and login

| Accour | nt Login |
|-----------------------|-----------------|
| Account name or email | |
| Password | 8 |
| Mobile Number Login | Remember me |
| Loi | g In |
| Free Registration | Forgot Password |
| IAM User Login | |
| Lise Anothe | |

In the Console, on the top left of the screen, select Navigation menu > Storage > Object Storage Service

| * | Console X | + | | | | |
|---------|-----------------------------|---------------------------------------|---------------|-----------------------------------|-----------------|-----------------|
| ← | → C 🔒 console-intl.huawe | icloud.com/console/?agencyld=09 | 33f7aae9800 | ff21f96c01784471bbc®ion= | ap-southeast- | 2&locale=en- |
| HUMINEE | HUAWEI CLOUD Console | o Bangkok 🗸 | | | | |
| ≡ | Service List | Enter a service or function name. | | | | |
| ٢ | Elastic Cloud Server | Recently Visited Services: Object Sto | orage Service | Elastic Cloud Server Relation | onal Database S | ervice Elast |
| ස | Relational Database Service | Computing | | Storage | | Network |
| NIA | Auto Scaling | Elastic Cloud Server | | Elastic Volume Service | | Virtual Private |
| ~ | | Auto Scaling | | Dedicated Distributed Storage Sen | vice | Elastic Load E |
| ۲ | Bare Metal Server | Image Management Service | | Storage Disaster Recovery Service | 3 | Virtual Private |
| | Elastic Volume Service | Dedicated Host | | Cloud Server Backup Service | | Direct Connee |
| គា | Volume Backup Service | Cloud Container Engine | | Cloud Backup and Recovery | | Domain Name |
| - | | Bare Metal Server | | Volume Backup Service | | NAT Gateway |
| Ø | Virtual Private Cloud | FunctionGraph | | Object Storage Service | 4 | Elastic IP |
| 4 | Elastic Load Balance | Dedicated Cloud | | Data Express Service | | Cloud Conner |
| 0 | Elactic ID | | | Scalable File Service | 1 | VPC Endpoin |
| 0 | Lindong II | Application | | CDN | | |
| | | Application Orchestration Service | | | | Manageme |
| | | Software Repository for Container | | Migration | | Cloud Eye |

On the top right of screen, Click on Create Bucket

Create Buck

| Create 3 bucket, with fo | ollowing information |
|--------------------------|------------------------------------|
| [Region] | AP-Bangkok |
| [Bucket Name] | kt8795, is used in an example |
| [Storage Class] | Standard |
| [Region] | AP-Bangkok |
| [Bucket Name] | kt8795-imgs, is used in an example |
| [Storage Class] | Standard |
| [Region] | AP-Bangkok |
| [Bucket Name] | kt8795-dev, is used in an example |
| [Storage Class] | Standard |

The name of Bucket must be globally unique in HUAWEI CLOUD OBS Service in the same region. You need to define the bucket name and cannot duplicate with other, for example to create you bucket name, e.g. yourname-4digits

Change Bucket permission

Click on Bucket name store website static and images example *kt8795* and *kt8795-imgs*, is used in an example in left panel click Permission, in right panel "Bucket Policies" change standard bucket policies to

"Public Read"

To allow anyone access to your static website and show image on web you need to assign permission on bucket as public read

(In your real production environment you need to consider setup Web server for secure website, code and script, security setup, call picture in OBS via API, data structure and etc.)

| ≡ | Object Storage Service | Object Storage / kt8795-imgs | | |
|-------------|--|---|---|--|
| ۵ ۵ | Overview | OBS provides access permission control for buckets, directories, and of Bucket Policies Bucket ACLs | bjects. You can configure operation permissions for users under your $\boldsymbol{\epsilon}$ | account or for other accounts. |
| MA ()) | Permissions Basic Configurations | Bucket policies provide centralized access control and take precedence You can find more information about configuring access permissions f Authorized users can log in to OBS Console or OBS Browser+ to acces Standard Bucket Policies | e over bucket ACLs in case of permission conflicts. Learn more for typical permission control scenarios in application examples. Learn a allowed resources, or use the authorizer's AK/SK to access allowed r | more esources by calling APIs or using SDKs. |
| 6 4 6 | Domain Name Mgmt Cross-Region Replication Image Processing Inventories Private Only the bucket owner can read, write, and de the bucket. | Private Only the bucket owner can read, write, and delete objects in the bucket. | Public Read Any user can read objects in the bucket. Only the bucket owner can write and delete objects in the bucket. | Public Read and Write Any user can read, write, and delete objects in the backet. |
| | | Custom Bucket Policies 🗸 | | |

Configure Static Website Hosting

Click on Bucket name, in left panel click Basic Configurations > Static Website Hosting, in right panel click "Configure Static Website Hosting"

| Ξ | Object Storage Service | Object Storage / kt8795 |
|----------|--------------------------------------|--|
| 6 | Overview Objects | Static Website Hosting You can upload static website files to a bucket and authorize anonymous users with the read permission, so that you can use OBS to host your static website files without requirements for servers. Learn more |
| 6 | Permissions | × × |
| 0 | Lifecycle Rules | |
| 0 (2) | Static Website Hosting CORS Rules | |
| 4 | URL Validation | |
| ø | Event Notification | With static website hosting, your static website contents can be easily accessed through the endpoint provided by OBS. |
| | Tags | Configure Static Website Hosting |
| | Domain Name Mgmt | |
| | Cross-Region Replication | |
| | Image Processing | |
| | Inventories | |

Change Status to enable and enter Home page value to "index.html"

| Selecting t bucket pol objects. | his option allows the website content to be accessed through the endpoint, provided that the icy is Public Read or anonymous users have been granted permission to read from the |
|---------------------------------------|---|
| Status | |
| Hosting By | Current bucket Redirection Learn how to configure. |
| Home Page | Index.html |
| | Only HTML files under the root directory are supported. |
| 404 Error Page | Example: error.html |
| | Only HTML, JPG, PNG, BMP, and WEBP files under the root directory are supported. |
| Redirection Rule | 1 |

Your will get Hosted Website URL, you can upload you static website to OBS and try to open URL e.g. <u>http://kt8795.obs-website.ap-southeast-2.myhuaweicloud.com</u>, you need this URL in next step



In the last step will show your how to modify website static and upload to OBS

Configure CORS Rules >>> can you explain what is CORS?

Click on Bucket name you plan to store idcard image e.g. kt8795-imgs, in left panel click Basic Configurations > CORS Rules, in right panel click "Create"

| Ξ | Object Storage Service | Object Storage / kt8795-imgs |
|---|---|---|
| | Object Storage Service Overview Objects Permissions Basic Configurations Lifecycle Rules Static Website Hosting CORS Rules URL Validation Event Notification Tags Domain Name Mgmt Cross-Region Replication | CORS Rules Cross-origin resource sharing (CORS) rules facilitate cross-doma Create Allowed Origin Allowed Method |
| | Image Processing | |

Input parameter

| Create CORS Rule | Learn how to configure. | × |
|----------------------|--------------------------|---------|
| * Allowed Origin 🏼 🄊 | https://www.example.com | |
| | | 0/1,024 |
| * Allowed Method | Get Post Put Delete Head | |
| Allowed Header | | |
| | | 0/1,024 |
| Exposed Header ⊘ | | |
| | | 0/1,024 |
| Cache Duration (s) | - 100 + | |
| | OK Cancel | |

| [Allowed Origin] | http://kt8795.obs-website.ap-southeast-2.myhuaweicloud.com, Is used in an example, in put your OBS website static URL in previous step. |
|-------------------|--|
| [Allowed Method] | POST, PUT, DELETE |
| [Allowed Header] | * |
| [Exposed Header]: | x-amz-server-side-encryption x-amz-request-id |
| | x-amz-id-2 |
| [Cache Duration]: | 3000 |

Create HUAWEI Cloud AK SK

In this section, you'll learn how to create AK SK from the Console.

In order to access HUAWEI CLOUD API such as Connect to OBS with OBS Browser client, call the API from customer premise application, call the API from FunctionGraph. You need to make and calling for Authenticated, In this lab will calling APIs through AK/SK authentication

In your production environment you need to create IAM Account and using IAM account AK/SK and avoid using root AK/SK

In the Console, on the top right of the screen, Rollover you mouse on your username and select "My Credentials"



On bottom of screen, Click "Access Keys" and "Create Access Key"



Click on "Send Code", then check your email and enter Verification Code then "OK".



Then you need to download AS SK file to your computer and keep in save place.



Create Relational Database Service

In this section, you need to completed learn HUAWEI CLOUD Fundamental service such as Virtual Private Cloud, Security Group, Elastic Cloud Server, Relational Database Service, you'll learn how to create Relational Database Service from the Console.

In the Console, on the top left of the screen, select Navigation menu > Network > Virtual Private Cloud



Click "Create VPC" in the upper right corner, configure as follows:

| Quick Links Create VPC | |
|------------------------|---|
| [Region]: | Bangkok |
| [Name]: | Enter a user-defined name. In this lab, "vpc-hol-ocr" is used as an example |
| [CIDR Block]: | 192.168.0.0/24, is used as an example |
| Basic Information | |

| Region | AP-Bangkok 👻 |
|------------|--|
| | Regions are geographic areas isolated from each other. Resources are region-specific and cannot latency and quick resource access, select the nearest region. |
| Name | vpc-hol-ocr |
| CIDR Block | 192 · 168 · 0 · 0 / 24 · |
| | Recommended: 10.0.0.0/8-24 (Select) 172.16.0.0/12-24 (Select) 192.168.0.0/16-24 (Select) |

Configure Default Subnet as follows:

| [Name]: [CIDR Block]: Default Subnet | Enter a user-defined name. In this lab, "subnet-hol-ocr" is used as a 192.168.0.0/24 | an example. |
|--|---|-------------|
| Name | subnet-hol-ocr | |
| CIDR Block | 192 • 168 • 0 / 24 ⑦ Available IP Addresses: 251 The CIDR block cannot be modified after the subnet has been created. | |
| Associated Route Table | Default ⑦ | |
| Advanced Settings | Gateway DNS Server Address DHCP Lease Time Tag | |

Click Create Now at lower right corner.

Setup Security Groups

In the Virtual Private Cloud console, click "Access Control" and "Security Groups" as follows:

| | Network Console | | | |
|---|-----------------------|--|--|--|
| | Dashboard | | | |
| I | Virtual Private Cloud | | | |
| | Subnets | | | |
| | Route Tables | | | |
| | Access Control | | | |
| | Security Groups | | | |
| | Network ACLs | | | |

Click "Create Security Groups" at upper right corner, configure as follows:

[Name]:Enter a user-defined name. In this lab, "sg-hol-ocr" is used as an example.[Template]:Custom[Description]:keep defaultClick OK

)

Create Security Group

| * | Name | sg-hol-ocr | | | | |
|------|--|---|--|---|-----------------------------|--|
| * | Template | Custom | | • | | |
| | Description | Inbound traffie After the secur add or modify | : is not allow rity group is o security grou | red on any p created, you up rules as r | oort. I can required. | |
| | \$ | | | | 0/255 | |
| | Hide Default Rule 🔺 |)the cure of | | | | |
| | Inbound | Jutbound | | | | |
| | Protocol & Port ⑦ | | Туре | | Source ? | |
| | All | | IPv4 | | sg-hol-ocr | |
| Clic | OK Cancel Click "Manage Rule" | | | | | |
| | Information | n | | | × | |
| T | he security group wa o enable access to ins | s created succes stances associat | sfully. Add s ed with the | security gro security gro | oup rules oup. | |
| | Ν | 1anage Rule | Cancel | | | |

Click "Inbound Rules", "Add Rule" and input 3306 in Protocol & Port for allow MySQL RDS Service, then Click OK

| < sg-hol-ocr Summary Inbound | Rules Outbound Rules Associa | ited Instances | | | 김 Import Rul |
|------------------------------|--|--|-------------|-------------|--------------|
| Add Rule Fa | Add Inbound Rule Learn more abo | out security group configuration. | | | × |
| 🗌 All | 1 Inbound rules allow incoming traffic to in | istances associated with the security group. | | | fy Rep |
| | Security Group sg-hol-ocr You can import multiple rules in a batch. | | | | |
| | Protocol & Port ⑦ | Source ⑦ | Description | Operation | |
| | TCP • | IP address 0.0.0.0/0 | • | Operation 🗸 | |
| | | Add Rule | | | |
| | | OK | Cancel | | |

In the Console, on the top left of the screen, select Navigation menu > Database > Relational Database Service

| ≡ | Service List | Enter a service or function name. | | | Q | | | × |
|------------|-----------------------------|---|--|--------|--|------|-----------------------------|------|
| ٢ | Elastic Cloud Server | Recently Visited Services: Object Storage Service | Elastic Cloud Server Relational Databa | ise Se | ervice Elastic Load Balance Auto Sca | ling | Virtual Private Cloud | |
| చి | Relational Database Service | Computing | Storage | | Network | | Database | |
| 00 | Auto Scaling | Elastic Cloud Server | Elastic Volume Service | K. | Virtual Private Cloud | | Relational Database Service | |
| | | Auto Scaling | Dedicated Distributed Storage Service | | Elastic Load Balance | | Document Database | æ |
| | Bare Metal Server | Image Management Service | Storage Disaster Recovery Service | | Virtual Private Network | | GaussDB NoSQL | т I. |
| \bigcirc | Elastic Volume Service | Dedicated Host | Cloud Server Backup Service | | Direct Connect | | Data Replication Service | - I |
| គា | Volume Backup Service | Cloud Container Engine | Cloud Backup and Recovery | | Domain Name Service | | Data Admin Service | - I |
| | | Bare Metal Server | Volume Backup Service | ĸ. | NAT Gateway | | | - L |
| Ø | Virtual Private Cloud | FunctionGraph | Object Storage Service | | Elastic IP | | Security | - L |
| 4 | Elastic Load Balance | Dedicated Cloud | Data Express Service | | Cloud Connect | | Anti-DDoS | - I |
| 0 | Elastic ID | | Scalable File Service | | VPC Endpoint | | Advanced Anti-DDoS | - I |
| 0 | EldSUC IP | Application | CDN | | | | Web Application Firewall | - L |
| | | Application Orchestration Service | | | Management & Deployment | | Vulnerability Scan Service | - I |
| | | Software Repository for Container | Migration | | Cloud Eye | | Host Security Service | 1 |

Click "Buy DB instance"



| Select parameter as below. | |
|----------------------------|--|
| [Billing Mode]: | Pay-per-use |
| [Region]: | AP-Bangkok |
| [DB Instance Name]: | rds-ocr, is used in an example, you can define name. |
| [DB Engine]: | MySQL |
| [DB Engine Version]: | 5.7 |
| [DB Instance Type]: | Single |
| [AZ]: | AZ1 |
| [Time Zone]: | UTC+07:00 |
| [Instance Class]: | 2 vCPU 4 GB |
| [Storage]: | 40 GB |
| [VPC]: | vpc-hol-orc, is used in an example and assign IP 192.168.0.100 |
| [Security Group]: | sg-hol-ocr, is used in an example. |
| | Make sure your inbound rules allow database port (3306) |
| [Database Port]: | Default 3306 |
| [Administrator Password]: | You define administrator password |

| Billing Mode | Yearly/Monthly | Pay-per-use | 0 | | |
|--------------------|---|---|------------------------------------|---|--|
| Region | AP-Bangkok | • | | | |
| 5 | Regions are geograpi the nearest region. | hic areas isolated from each o | ther. Resources are regio | on-specific and | |
| DB Instance Nam | rds-ocr | | 0 | | |
| | If you buy multiple D instance-0001, the se | B instances at a time, they wi econd as instance-0002, and so | ll be named with four d o on. | igits appended | |
| DB Engine | MySQL | PostgreSQL | Microsoft SQL Serv | er Lean | |
| DB Engine Versio | n 8.0 | 5.7 | 5.6 | | |
| DB Instance Type | Primary/Standb | y Single | | | |
| | Single-node architect | ture is cost-effective and suital | ole for developing and t | esting of micro | |
| Storage Type | Recommen Ultra-high I/O | ded Learn more about stora | ge types. | | |
| AZ | az1 | az2 | | | |
| Time Zone | UTC+07:00 | • | | | |
| | vCPU Memory 2 vCPUs 4 GB 2 vCPUs 8 GB | Maximum Conne | 2,500 | TPS/QPS ⑦ 474 9,236 602 11,865 | |
| | 4 vCPUs 16 GB | | 5,000 | 1,371 26,281 | |
| | 8 vCPUs 16 GB | | 5,000 | 1,971 38,234 | |
| | 16 VCPUs 32 GB | | 8,000 | 3,312 62,769 | |
| | DB Instance Specifications General-e | nhanced II 2 vCPUs 4 GB , Maximum | Connections : 1500 , TPS/QPS: 4 | 74 9236 | |
| | 40 GB | | | | |
| Storage Space (GB) | (II) 40 E | 100 1,550 2,3 | 00 4,000 | 40 + | |
| | 40 GB is recommended. Enjoy more ber | efits of free packages. Learn more | DD maturice. After the free but | Rup space is used up, energ | |
| Disk Encryption | Disable Enabl | e ⑦ | | | |
| | | | | | |
| | Relationship among VPCs, subnets, secur | ity groups, and DB instances | | | |
| VPC ⑦ | vpc-hol-ocr After the RDS instance is created, the VPC | c subnet-hol-ocr(192.168.0.0/24 cannot be changed. ECSs in different VPCs | cannot communicate with each o | .0.100 View In-u other by default. If you want to create a | ise IP Address VPC, go to the VPC console. Available Private IP |
| Security Group | Addresses: 251 | C. View Security Group | | <u>[</u>] | |
| second croop () | Inbound: TCP/3306 Outbound: In a security group, rules that authorize conn | ections to DB instances apply to all DB inst | ances associated with the security | group. | |
| Database Port | Default port: 3306 | | | | |
| | The database port of read replicas (if any) is | the same as that of the primary DB instant | ie. | | |

Create DB Instance and wait until database create successful.

Create Account in Database

Click on "Instance Management" and select Instance name

| Ξ | RDS | Relational Da | tabase Service | 0 | | |
|----------|----------------------|---------------|------------------------------|---------------|-------------|-----------------------|
| 6 | Instance Management | Renew | Unsubscribe | Change to Yea | rly/Monthly | Reboot |
| ΛŰΛ | Backup Management | | | | All | DB engines |
| ۲ | Management | | Name/ID J≣ | | Description | DB In |
| | Task Center | | rds-ocr 32898c260743406b9 | 926860559c 🗂 | | Single 2 vCPUs I 4 |
| 0) | Recycling Management | | | | l | |
| Ø | Data Admin Service | | | | | |
| 4 | | | | | | |

Click on "Accounts" and "Create Account", create sub account to access database instead of use root account

| ≡ | < rds-ocr 🔹 📀 Av | ailable |
|---------------|--------------------------|----------------|
| 6 | Basic Information | |
| යි | Backups & Restorations | Create Account |
| <i>.</i> 001, | EIPs | Username Sta |
| ۲ | Connection Management | Ş |
| 0 | Accounts | |
| | Databases | |
| Ø | Logs | |
| ♪ | SQL Audits | |
| P | Parameters | |

Create an OCR database username and password is use as an example below

| [Username]: | ocr_user |
|---------------------|---|
| [Password]: | Welcome1, is used as an example. Your need to define it |
| [Confirm Password]: | retype your password again |

×

| Username | | ? | | |
|------------------------|--|---|---------------|--------------------|
| Database | Database Not Authorized | | Database Auth | Permission |
| | | | | No data available. |
| | | | | |
| | | | | |
| | | | | |
| Password | | | | |
| Confirm Password | | | | |
| If you require a fined | arained backup policy log in to the database | | | |
| n you require a mica | granter autorp panty, tog in to are autorate | | | R. − |

Create Database

Click on "Databases" and "Create Database"

| ≡ | < rds-ocr 🔹 💿 Ava | ilable | |
|---------|--------------------------|-----------------|--------|
| 6 | Basic Information | | |
| යි | Backups & Restorations | Create Database | |
| MA | EIPs | Database Name | Status |
| ۲ | Connection Management | | |
| 0 | Accounts | | |
| Ð | Databases | Ν | |
| \odot | Logs | 43 | |
| \$ | SQL Audits | | |
| P | Parameters | | |
| | Advanced O&M | | |
| | Tags | | |
| | CloudDBA | | |

| Input parameter | |
|--------------------|--|
| [Database Name]: | ocr_db, is used in an example |
| [Character Set]: | Utf8mb4 |
| [Authorized User]: | ocr_user, is used in an example. You need to select your database username |
| [Permission]: | Read and write |

| Database Name | ocr_db | | 0 | | | | |
|-----------------------|-----------------|---------------------|-----------------|-----------------------------|-------|--------------------------|--|
| Character Set | 🔘 utf8 | 🔘 gbk | 🔘 latin1 | utf8mb4 | More | | |
| Jser | User Not A | uthorized | | Authorized | User | Permission | |
| | | No data availat | le. [| ocr_user | O Rei | ad only 💿 Read and write | |
| | | | | | | | |
| f you require a finec | l-grained backu | ip policy, log in t | o the database. | | | | |

HUAWEI CLOUD provide Database Administrative tools, Data Admin Service (DAS) is a one-stop cloud database management platform that allows you to manage databases on a web console. It offers database development, O&M, enterprise-level DevOps, and intelligent diagnosis, facilitating your cloud database usage and maintenance.

Click on Login button on top of screen to Login to RDS Service enter your OCR username and password to access to RDS

| | stations Louis |
|-------------|---|
| U | alabase Login |
| L | Isername : |
| F | Yease enter the database login account, such as: root |
| Pa | ssword: |
| | × |
| _ | |
| | Remember Password |
| | Metadata Collection ③ |
| f ti def | is item is not enabled, DAS can only query the database to query these structure inition data in real time, which has a certain impact on the real-time performance of in database. |
| | SOL Execution Record (2) |
| AR | er turning this on, you can easily view your SQL window execution history in the DAS, |

Open new SQL Window, Click on SQL Operations > SQL Window



Change Database to ocr_db

| Database: | ocr_db | V |
|------------|-----------|----|
| Tables | Views | |
| Please sea | arch by k | ac |

Create Table in ocr_db with below structure and click "Execute SQL"

```
CREATE TABLE `id_card_tbl` (

`idno` varchar(200) DEFAULT NULL,

`fname` varchar(200) DEFAULT NULL,

`birthday` varchar(200) DEFAULT NULL,

`addr` varchar(200) DEFAULT NULL,

`isdate` varchar(200) DEFAULT NULL,

`expdate` varchar(200) DEFAULT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```



Subscribe Optical Character Recognition Service

In this section, you'll learn how to Subscribe OCR Optical Character Recognition Service. In the Console, on the top left of the screen, select Navigation menu > EI Enterprise Intelligence > Optical Character Recognition"

| HUAINE | HUAWEI CLOUD Consol | e o Bangkok 🔹 |
|--------|-----------------------------|--|
| ≡ | Service List > | x Q |
| ٢ | Elastic Cloud Server | |
| යි | Relational Database Service | El Enterprise Intelligence Optical Character Recognition 4 |
| ,000 | Auto Scaling | Optical Character Recognition |
| 6 | Bare Metal Server | |
| 6 | Flastic Volume Service | |

Click Service Management,

| Ξ | Optical Character | Service |
|-----|--------------------|---------|
| ٢ | Recognition | OBS |
| යි | Service List 👻 | Allov |
| λΰλ | Service Management | |
| | | |
| 0 | | |
| 0 | ru | |

Click Subscribe on "Thai ID Card OCR"



Prepare FunctionGraph environment

Upload file cloud-ocr-sdk-python-1.0.5.zip doud-ocr-sdk-py in C:\HOL-OCR\Func\ to your OBS Dev code Bucket e.g. kt8795-dev, is used as an example, go to Object Storage Service and click on kt8795-dev Bucket, Click on Upload Object,

| ≡ | Object S | torage Service | Object Storage / kt8795- | dev 🗇 | | | | |
|---------|-------------|---|--|----------------------------|--------------------------|---------------------|------------------|----------|
| ٢ | Overview | | Objects De | eleted Objects | Fragments | | | |
| & MA | Objects | | Objects are basic units | s of data storage. | In OBS, files and folder | s are tr | | |
| 6 | Permission | 15 | Upload Object | Create Folde | r Restore | Del | | |
| 0 | Domain N | ame Mgmt | □ Name 1Ξ | | Storage Cla | 4= | | |
| Ð | Cross-Reg | ion Replication | | | | | | |
| Ø | Image Pro | cessing | | | | | | |
| 4 | Inventorie | s | | | | | | |
| P | | | | | | | | |
| U | pload Ob | EXAMPLE 1 How to Upload a Standard | File Greater than 5 GB? Infrequent Access tly accessed (multiple times | Archive per month) data | such as small and essen | tial files that req | uire low latency | y. |
| | | The default storage cla more | ass is the same as that of th | e bucket. You can | change the storage clas | s according to yo | ur actual need | s. Learn |
| Up | load Object | Note: If the bucket is r existing file/folder. | not versioning-enabled, uplo | ading a file/folder | with the name that alr | eady exists in the | bucket will rep | ace the |
| | | Remove All | Add File | | | | 1/100 Files Siz | e 8.67 M |
| | | Name | | | Size | | Operation | |
| | | cloud-ocr-sdk-py | thon-1.0.5.zip | | 8.67 MB | | Remove | |
| End | ryption | Encrypts the file for se KMS encryption | cure storage. The encryption | n status of the end | nypted file cannot be ch | anged. | | |
| | | \sim | Upl | oad Can | cel | | | |

You can check status of upload file at the bottom Task Management bar or click on an object, In this lab will use object Link in next step.



Create Agency, on the top left of the screen, select Navigation menu > Management and Deployment > Identity and Access Management, Click on Agencies

HUAWEI CLOUD agency function enables you to delegate another HUAWEI CLOUD account to implement O&M on your resources based on assigned permissions, in this lab is used for FunctionGraph and assign authorize to access VPC

| L≡ | |
|-----------------------|---|
| IAM | |
| | |
| Users | |
| User Groups | |
| Permissions | |
| Projects | |
| Agencies | |
| Identity Providers | |
| Account Settings | |
| | + Create Agency |
| Click "Create Agency" | |
| Input parameter | |
| [Agency Name]: | You define agency name e.g. FunctionGraph, is used in an example. |
| [Agency Type]: | Cloud service |
| [Cloud Service]: | FunctionGraph |
| [Validity Period]: | Unlimited |
| [Permission] | VPC Full Access All projects |
| [i ciriiissioii]. | |

| Agency Name | functionGraph | | | | |
|-----------------|--|---------------------------|---|---|-----------|
| Agency Type | Account Delegate another HUAWEI CLOUD Cloud service Delegate a cloud service to access | account to perform operat | ions on your resources. Id services. | | |
| Cloud Service | FunctionGraph | | | | |
| Validity Period | Unlimited | | | | |
| Description | Enter a brief description. | | | | |
| | | | | | |
| | | 0/255 | All addition for last | | |
| rennissions | Assign Permissions | | All policies/roles + Enter a p | oucy name, role name, or description. | Project |
| | Policy/Role Name ↓Ξ | Type JΞ | Description ↓≡ | Project [Region] | Operation |
| | VPC FullAccess | System-defined p | All permissions of VPC service. | All projects [Existing and future projects] | Remove |
| | 1.2 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

In next step will use this Agency in FunctionGraph environment and allow Function call to HUAWEI RDS Service

In the Console, on the top left of the screen, select Navigation menu > Compute > FunctionGraph Create Private Dependencies,

| ≡ | FunctionGraph |
|-------------|--------------------|
| 6 | |
| යි | Dashboard |
| <i>.</i> 00 | Templates |
| ۲ | Functions |
| 0 | Trigger List |
| Ø | Reserved Instances |
| Ø | Dependencies |
| Φ | Tools |
| ۲ | Tutorials |
| | |

Click "Create Dependency"

+ Create Depertitiency

To cut time to develop code, you can reuse huawei-sdk development package such as authentication AK/SK and call to package by using Dependency, This lab we pre-build code and test with python2.7.

| Name | hwc-ocr-python |
|------------------------|--------------------------------------|
| Runtime | Python 2.7 |
| Description | Enter a maximum of 512 characters. |
| Upload Mode | Upload ZIP file Upload file from OBS |
| Paste the OBS link | URL of a ZIP file. View OBS console |
| | |

Input parameter Namal

| [Name]: | hwc-ocr-python |
|----------------|--|
| [Runtime]: | Python 2.7 |
| [Upload Mode]: | Upload file from OBS |
| [Link URL]: | cloud-ocr-sdk-python-1.0.5.zip Link from previous step |

[Note] If package dependency sizing over than 10MB, you need to upload dependency from OBS

Create FunctionGraph with the Console

In this section, you'll learn how to create FunctionGraph from the Console.

To complete this lab, you need to completed

- Created OBS and setup permission, website static, CORS
- Created AK/SK
- RDS Setup,
- Prepare FunctionGraph environment

Create First Function upload image with following information

| Create from scratch |
|-----------------------------------|
| upload_img, is used in an example |
| default |
| Use no agency |
| keep default |
| Node.js 12.13 |
| keep default |
| Edit code inline |
| |



in C:HOL-OCR in this lab.

You should open with editor e.g. Notepad, notepad++ then modify script and copy a content and paste to the code inline console

Upload_img.js

Function upload_img, you need to modify parameter below.

Line 7: access_key_id: 'replace with your ak',

Line 8: secret_access_key: 'replace with your sk',

Line 64: Bucket: "replace with your upload OBS bucket name", example kt8795-imgs, is used in an example

| Template | Create from scratch Select template |
|--|---|
| * Function Name | Enter a function name. |
| | Enter 1 to 60 characters, starting with a letter and ending with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed. |
| * App 🕐 | default 👻 |
| | Select an app or define a new app. Enter 1 to 60 characters, starting with a letter and ending with a letter or digit. Only letters, digits, hyphens (-), and underscores (_) are allowed. |
| Agency 💿 | Use no agency |
| | Specify an exclusive agency for function execution |
| Description | Enter a maximum of 512 characters. 0/512 |
| N | |
| し Runtime | Node.js 12.13 |
| | |
| * Handler | index.handler |
| Edit code inline If the code to be uploaded leakage. | Upload ZIP file Upload file from OBS I contains sensitive information (such as account passwords), encrypt the code to prevent information Learn how to use IDE. |
| File Edit Find Go to | ● View Street S |
| | <pre>// init // init // var fs = require('fs'); // create ObsClient = require('esdk-obs-nodejs'); // create ObsClient instance var obsClient = new ObsClient({ access_key_id: 'replace with your sk', secret_access_key: 'replace with your sk', server : 'obs.ap-southeast-2.myhuaweicloud.com', max_retry_count : 1, it timeout : 200, is ssl_verify : false, long_con_param : 0 } // declare params resports.handler = (event, context, callback) => { console.log('Processing request from apig trigger'); } let bodyStr = event.body; if (event.isBase64Encoded == true){ var base64data = new Buffer(event.body, 'base64'); bodyStr = base64data.toString(); } // accessed to the set in the state of the set in the set i</pre> |
| Then, Click Crea | te Now |
| chek on i unetio | in name apload_ing to moving parameter |

 Function name
 Description
 Configuration
 Last modified
 Operation

 upload,ing
 - Runtime Node,is 12.13
 Memor Oct 17, 2020 13:31:11 GM...
 Operation •

Click on Configuration Tab, and Modify Memory (MB) to 256 and Execution Timeout(s) to 300

| Code | Configuration | Triggers | File System | s Moni | itoring | Logs | Aliases | | | | | | |
|---------|--------------------|---------------------|-------------------|--------------|-------------|-------------|---------------|----------|--------------|------------|------|-----------|------|
| Descr | iption | Enter a max | imum of 512 c | haracters. | | | | | | | | | |
| | | | | | | | 0, | /512 | | | | | |
| Ageno | cy 🕐 | Use no age | псу | | | | | • | C Create | Agency | | | |
| | | Specify a | n exclusive age | ncy for fund | tion execu | ution | | | | | | | |
| Memo | ory (MB) | 0 128 256 | 512 | 768 | 1024 | 1280 | 1536 | 1792 | 2048 | 2560 | 3072 | 3584 | 4096 |
| * Execu | tion Timeout (s) 🕐 | 300 | | | | | | | | | | | |
| VPC A | Access 🕐 | An ag | gency with VPC | manageme | ent permis | sions mus | t be specifie | d for th | ne function. | Learn more | | | |
| Enviro | nment Variables 🕐 | i Environme | ent variables are | displayed in | plain text. | Exercise ca | ution to prev | ent info | rmation leak | age. | | | |
| | | Кеу | | | Val | ue | | | | | | Operation | |
| | | | | | | | | | | | | | |

Then click Save

Create Second Function with following information

| [Template]: | Create from scratch |
|--------------------|----------------------------|
| [Function Name]: | ocr, is used in an example |
| [App]: | default |
| [Agency]: | Use no agency |
| [Description]: | keep default |
| [Runtime]: | python2.7 |
| [Handler]: | keep default |
| [Code Entry Mode]: | Edit code inline |
| | |



in C:\HOL-OCR\func\ in this lab.

You should open with editor e.g. Notepad, notepad++ then modify script and copy a content and paste to the code inline console

orc.py

Function ocr.py, you need to modify parameter below.

Line 19: ak = "replace with your ak"

Line 20: sk = "replace with your ak"

Line 21: imagePath = "https://<replace with your upload OBS bucket name>.obs.ap-southeast-2.myhuaweicloud.com/" + filePath

for example <u>https://kt8795-imgs.obs.ap-southeast-2.myhuaweicloud.com/</u>, is used in an example.

| Template | Create from scratch Select template | |
|------------------------------|--|---------------|
| * Function Name | Enter a function name. | |
| | It is field cannot be left blank. | |
| | Enter 1 to 60 characters, starting with a letter and ending with a letter or digit. Only letters, digits, and underscores () are allowed. | hyphens (-), |
| * App ③ | default | |
| | Select an app or define a new app. Enter 1 to 60 characters, starting with a letter and ending with a letter or digit. Only letters, digits, and underscores () are allowed. | hyphens (-), |
| Agency 🕐 | Use no agency C Create Agency | |
| | Specify an exclusive agency for function execution | |
| Description | Enter a maximum of 512 characters. 0/512 | |
| | | |
| Runtime | Python 2.7 | |
| | Learn how to develop functions in Python. | |
| * Handler | index.handler | |
| | Set a handler with a maximum of 128 characters in the format of [file name].[execution function n | ame]. |
| Code Entry Mode | | |
| Edit code inline | Upload ZIP file Upload file from OBS | |
| If the code to be uploaded c | ontains sensitive information (such as account passwords), encrypt the code to prevent infor | mation |
| leakage. | Learn by | ow to use IDF |
| File Edit Find Go to | View | N to use IDE. |
| • 🗅 index.py | • index.py X | |
| | <pre>1 # -*- coding:utf-8 -*- 2 import json 3 from HWOcrClientAKSK import HWOcrClientAKSK 4 import sys 5 import os 6 import base64 7 8 reload(sys) 9 sys.setdefaultencoding('utf8') 10 10 def handler (event, context): 12 filePath = event["body"] 13 if event["isBase64Encoded"]: 14 filePath = filePath.strip('"') 15 filePath = filePath.strip('"') 16 print(filePath)</pre> | |



Then, Click Create Now Create Now

region = "ap-southeast-2" I ak = "replace with your ak" sk = "replace with your sk" imagePath = "<u>https://replace</u> with your upload OBS bucket.obs.ap-so option = {}

Initialize ocr_client
ocr_client = HWOcrClientAKSK(ak, sk, region)
response = recognizeIdCard(ocr_client, imagePath, option)

In Code tab, Click Select dependency

| Code Configuratio | on Triggers File Systems Monitoring Logs Aliases |
|-------------------|---|
| Runtime | Python 2.7 Learn how to develop functions in Python. |
| Initialization 🕜 | |
| * Handler | index.handler |
| | Set a handler with a maximum of 128 characters in the format of [file name].[execution function name]. |
| Dependencies 🕐 | Select total dependencies: 0; max. dependencies: 20 |
| Code Entry Mode | Edit code inline Upload ZIP file Upload file from OBS |
| | If the code to be uploaded contains sensitive information (such as account passwords), encrypt the code to prevent information leakage. |

Click Private and select hwc-ocr-python, the dependency you have created

| All | Private Public | | N | Name 👻 | | QC |
|-----|----------------|------------|---------|------------------|-------------|----|
| | Name | Runtime | Address | S | Description | |
| | hwc-ocr-python | Python 2.7 | https:/ | //kt8795-dev.obs | | |

Click on Configuration Tab, and Modify Memory (MB) to 256 and Execution Timeout(s) to 300

| Description | Enter a maximur | m of 512 character | rs. | | | | | | | |
|----------------------------------|------------------------------------|-----------------------|---------------------|----------------------|-------------|----------------------------|-----------|------|-----------|------|
| | | | | | 0/512 | | | | | |
| Agency 🕐 | Use no agency | | | | • (| Create A | gency | | | |
| Memory (MB) | Specify an exc | lusive agency for | function executi | on | 1792 | 2048 | 2560 | 2072 | 2584 | |
| * Execution Timeout (s) (| 300 | 512 700 | 1024 | 1200 1330 | 1752 | 2040 | 2300 | 5072 | 5504 | 4050 |
| VPC Access 🕜 | An agency | y with VPC manag | ement permissio | ons must be specif | fied for th | e function. <mark>L</mark> | earn more | | | |
| Environment Variables 🕥 | Environment va | ariables are displaye | d in plain text. Ex | ercise caution to pr | event infor | mation leakag | je. | | | |
| | Key | | Value | B | | | | | Operation | |
| | ß | | | | | | | | | |
| Then click Save | Save | | | | | | | | | |

Code **Configuration** Triggers File Systems Monitoring Logs Aliases

| Create third Function s | store data into database with following information |
|-------------------------|---|
| [Template]: | Create from scratch |
| [Function Name]: | dbstore, is used in an example |
| [App]: | default |
| [Agency]: | Function, is used in an example in this lab. |
| [Description]: | keep default |
| [Runtime]: | Python2.7 |
| [Handler]: | keep default |
| [Code Entry Mode]: | Edit code inline |



in C:\HOL-OCR\func\ in this lab.

You should open with editor e.g. Notepad, notepad++ then modify script and copy a content and paste to the code inline console

dbstore.py

Function dbstore.py, you need to modify parameter below.

Line 13: connection = pymysql.connect(host='your rds MySQL IP', Same IP Address in step create Database example 192.168.0.100 is used in this lab.

Line 14: user='your rds mysql username', same as you create in step Create Database e.g. ocr_user, is used in an example.

Line 15: password='your rds mysql password', same as you create in step Create Database e.g. Welcome1, is used in an example.

Line 16: db='your rds mysql database', same as you create in step Create Database e.g. ocr_db, is used in an example.

| Template | Create from scratch | Select template | |
|------------------|---|---|---|
| * Function Name | Enter a function name. | | |
| | Enter 1 to 60 characters, sta and underscores (_) are allo | rting with a letter and ending with a wed. | a letter or digit. Only letters, digits, hyphens (-), |
| * Арр 🕐 | default | Ŧ | |
| | Select an app or define a ne Enter 1 to 60 characters, sta and underscores (_) are allo | ew app. Irting with a letter and ending with a wed. | a letter or digit. Only letters, digits, hyphens (-), |
| Agency 🕐 | FunctionGraph | v | C Create Agency |
| Description | Specify an exclusive a Enter a maximum of 51 | gency for function execution 2 characters. | |
| | | 0/51. | 2 |
| Runtime | Python 2.7 | | |
| | Learn how to develop funct | ions in Python. | |
| * Handler | index.handler | | |
| | Set a handler with a maxim | um of 128 characters in the format c | of [file name].[execution function name]. |
| Code Entry Mode | | | |
| Edit code inline | Upload ZIP file | Upload file from OBS | |

If the code to be uploaded contains sensitive information (such as account passwords), encrypt the code to prevent information leakage.



Then, Click Create Now Create Now

Click on Function name dbstore to modify parameter

| Function name | Description | Configuration | Last modified | Operation |
|---------------|-------------|--------------------------------|--------------------------|-------------|
| dbstore | | Runtime Python 2.7 Memory (I | Oct 17, 2020 14:19:21 GM | Operation 🗸 |

In Code tab, Click Select dependency

| Code Configuratio | n Triggers File Systems Monitoring Logs Aliases |
|-------------------|---|
| Runtime | Python 2.7 Learn how to develop functions in Python. |
| Initialization 🕜 | |
| * Handler | index.handler |
| | Set a handler with a maximum of 128 characters in the format of [file name].[execution function name]. |
| Dependencies 🕐 | Selent total dependencies: 0; max. dependencies: 20 |
| Code Entry Mode | Edit code inline Upload ZIP file Upload file from OBS |
| | If the code to be uploaded contains sensitive information (such as account passwords), encrypt the code to prevent information leakage. |

>

Click Public and select pymysql-0.7.12

Select Dependency

| pymysq | -0.7.12 × Name obssdk-3.0.2 | Runtime | Address | Description |
|--------|-----------------------------------|--------------|-------------------------|------------------------------|
| | Name obssdk-3.0.2 | Runtime | Address | Description |
| | obssdk-3.0.2 | | | |
| | | Python 2.7 | https://function-comm | The OBS SDK is used in |
| | pandas-0.23.4 | Python 2.7 | https://function-comm | Pandas is a Python dat |
| | huaweicloud-ocr-sdk-1 | Node.js 8.10 | https://function-depen | Optical Character Reco |
| | pillow-6.2.2 | Python 2.7 | https://functionstorage | The Python imaging lib |
| 2 | pymysql-0.7.12 | Python 2.7 | https://functionstorage | PyMySQL is a Python li |
| | openstacksdk-1.0.6 | Python 2.7 | https://functionstorage | The OpenStack SDK is |
| | openstacksdk-1.0.6 | Python 2.7 | https://function-comm | Mako is a high-perform. |
| | Jinja2-2.10 | Python 2.7 | https://function-comm | Jinja2 is a full featured t. |
| | opencv-4.0.0.21 | Python 2.7 | https://function-comm | OpenCV is a cross-platf |

Click on Configuration Tab,

Modify Memory (MB) to **256** and Execution Timeout(s) to **300** Turn on VPC Access, and select VPC and Subnet which is RDS Service created, e.g. VPC: vpc-hol-ocr, Subnet: subnet-hol-ocr, is used in an example.

| Description | Enter a maximum of 512 characters. |
|-------------------------|---|
| | |
| | 0/512 |
| Agency 🕐 | FunctionGraph |
| | Specify an exclusive agency for function execution |
| Memory (MB) | 0 128 256 512 768 1024 1280 1536 1792 2048 2560 3072 3584 4096 |
| Execution Timeout (s) ⑦ | 300 |
| VPC Access 🕐 | An agency with VPC management permissions must be specified for the function. Learn more |
| VPC | vpc-hol-ocr (192.168.0.0/24) |
| Subnet 🕞 | subnet-hol-ocr (192.168.0.0/24) |
| Environment Variables 🕥 | ① Environment variables are displayed in plain text. Exercise caution to prevent information leakage. |
| | Kau Malus Operation |

Create an API-Gateway with the Console

In this section, you'll learn how to create API-Gateway from the Console. In the Console, on the top left of the screen, select Navigation menu > Application > API Gateway

| ≡ | Service List > | api I |
|-------|-----------------------------|-------------|
| 6 | Elastic Cloud Server | Annlineting |
| යි | Relational Database Service | API Gateway |
| , NIA | Auto Scaling | |
| | Bare Metal Server | |
| 0 | Elastic Volume Service | |

Click "Shared Gateway"

In this lab will use shared Gateway for testing, in your production environment you may need to purchase dedicated Gateway for isolate resource and improve throughput

| ≡ | API Gateway |
|-----|--------------------|
| 6 | |
| A | Overview |
| ω | Shared Gateway |
| 000 | Dedicated Gateways |
| ۲ | Uolo Center |
| 0 | netp Center |

Click "API Groups" and Create API Group, in this lab will store APIs used for the same service

| API Gateway | * | |
|--------------------|------------------|---|
| <u></u> | | |
| Shared Gateway | | |
| API Publishing | * | |
| API Groups | | |
| APIs | | |
| Request Throttling | | Create API Group |
| Access Control | | * Name APIGroup_ocr |
| Environments | | Enter 3 to 64 characters, starting with a letter. Only letters, digits, and underso allowed. |
| Signature Keys | | Description Enter a maximum of 255 characters. |
| VPC Channels | | |
| Custom Authorizers | Create ADI Creue | |
| API Calling | | OK Cancel |

Create API

Then go back to "Share Gateway" page and click "Create API"

Create API with parameter below and publish API [NAME]: API_ocr, is used in an example [API Group]: APIGroup_ocr, is used in an example [Gateway Respose]: Default [Security Authentication]: None Basic Information APL_oc
Enter 3 to 255 characters, starting with a letter. Only letters, digits, and underscores (_) are allowed. * Name APIGroup_orr

C Create API Group * API Group There are 6 APIs under the selected API group. You can create 194 more APIs. default 👻 * Gateway Response Public Visibility Security Authentication App IAM Custom None No authentication is required. All users are granted access. (Not recom Enter a tag name. Tag Name A tag name must contain 3 to 24 characters and start with a letter. Only letters, digits, and underscores (_) are allowed. Separate multiple tags with commas (,) Description [Protocol]: HTTP [Path]: /ocr, is use in an example [Matching]: Exact match [Method]: POST [CORS]: Enable

| Define | API | Ren | liest |
|--------|-----|-----|-------|
| Denne | ALI | reu | uesu |

| Domain Name | 355c41f82de44 | 419ca328c3ef7 | 4f04523.apig.ap-sout | heast-2.huaweicloudapis.com |
|------------------|-------------------|--------------------|----------------------------|---|
| Protocol | HTTP | HTTPS | HTTP&HTTPS | |
| | WebSocket is sup | ported for HTTP | and HTTPS. | |
| * Path | /ocr | | | |
| | Enclose paramete | ers in braces, for | example, /a/{b}. In additi | ion, use a plus sign (+) to match parameters starting with specific characters, for example, /a/{b+}. |
| Matching | Exact ma | atch | Prefix match | |
| | API requests will | be forwarded to | the specified path. | |
| * Method | POST | , | • | |
| CORS | | | | |
| CORS | Learn more abou | it CORS. | | |
| | | | | |
| Input Parameters | ~ | | | \searrow |
| | | | | |
| | | | | |
| Rody | | | | |
| body | | | | |
| | | | | 0/20.480 |

| Backend Type]: Function URN]: Other]: | | FunctionGraph ocr, is use in an example default |
|---|--|--|
| Define Backend Request | | |
| Backend Type | HTTP/HTTPS FunctionGra unctionGraph is a compute service th | aph Mock lat hosts event-driven functions. |
| You can add backend policies to You can create 5 more backend p Default Backend | differentiate backend definitions. Eac | ch backend policy can have multiple conditions, and only reque |
| Basic Information | | |
| * Function URN | urn:fss:ap-southeast-2:0933fc6 | Geb380/5b Select Function URN |
| * Version | LATEST | • |
| * Invocation Mode | Synchronous | • |
| * Timeout (ms) | 5000 | |
| Backend Authentication | Specify a custom authorizer to c | control access to the backend service. |
| Select Function URN | | Enter a function name. Q C |
| Function Name | LIPN | Description |
| upload_img | urn:fss:ap-southeast-2:0933f | fc6eb |
| O ocr | urn:fss:ap-southeast-2:0933f | fc6eb |
| O dbstore | urn:fss:ap-southeast-2:0933f | tсбеb |
| | OK Cancel | |

| [Example Success Response]: | 200 |
|-----------------------------|-----|
| [| |

| Define Response | | | |
|----------------------------|-----------|-------------|-------------|
| ★ Example Success Response | 200 | I | |
| Example Failure Response | | | 3/20,480 |
| | | | 0/20,480 |
| Then click Finis | Sh Finish | Publish API | Publish API |

| API Name | API_ckhw |
|-------------|--|
| Environment | RELEASE C Create Environment |
| | Publishing the APIs will overwrite their existing configurations in the environment. |
| Description | Enter a maximum of 255 characters. |
| | 0/255 |

Click Publish Publish

Repeat create API step for path /obs, /dbstore and Select Function URN obs and dbstore Repeat create API step for path /ocr, /obs and /dbstore change method to **OPTIONS** and Backend type to **Mock**

Now you need to find your subdomain Name URL in Summary page of API Group

| API Groups / APIG | oup_ocr | | Man |
|-------------------|--|-------------|----------------------------------|
| Summary | APIs Variables Domain Names Gateway Responses | | |
| | | | |
| | | | |
| Name | APIGroup_ocr 🖉 | ID | 355c41f82de4419ca328c3ef74f04523 |
| Created | Oct 17, 2020 14:48:39 GMT+08:00 | Description | |
| Subdomain Name | and the second | | |
| | The subdomain can be used only for development and testing and can be accessed 1,00 | | |
| | | | |
| | | | |

Upload static website to OBS

In this section, you'll learn how to upload File to OBS To complete this lab, you need:

- Finish all lab above
- Modify script code in static website and upload to OBS Static website bucket

Modify java script in folder C:\HOL-OCR\ocr-hol-demo\static\js you need to modify two files You should open with editor e.g. Notepad, notepad++ then modify script Find and replace with your setup environment in Subdomain Name

http://replace_with_your_apig_group.apig.ap-southeast-2.huaweicloudapis.com/dbstore http://replace_with_your_apig_group.apig.ap-southeast-2.huaweicloudapis.com/obs http://replace_with_your_apig_group.apig.ap-southeast-2.huaweicloudapis.com/ocr //replace_with_your_obs_image_bucket.obs.ap-southeast-2.myhuaweicloud.com/

After you modify script, upload all files and folder to OBS Static website bucket. E.g. kt8975, is used in an example.

| ≡ | Object Storage Service | Object Storage / kt8795 🗇 | |
|--------|--|--|-----|
| ٢ | Overview | Objects Deleted Objects Fragments | |
| | Objects Permissions Basic Configurations * Domain Name Mgmt Cross-Region Replication Image Processing | Ot Upload Object: How to Upload a File Greater than 5 GB? Image: Standard infrequent Access infra Access infrequent Access infrequent Access infrequent Access infrequent Access infrequent Access infra Access infra Access infrequent Access infrequent Access infrequent Access infra Accesta Accesta Access infra Accesta Access infra Access in | |
| ⊕ © | Inventories Up | Upload Object Note: If the bucket is not versioning-enabled, uploading a file/folder with the name that already exists in the bucket will replace the existing file/folder. wnload Share More ♥ OBS OBS wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ wnload Share More ♥ | |
| | | Drag files or folders here to upload. Or add file writoad [Share More + (A maximum of 100 files can be uploaded at a time. The total size cannot exceed 5 GB.) writoad [Share More + Encryption Encrypts the file for secure storage. The encrypted file cannot be changed. writoad [Share More + Writoad Share More + writoad [Share More + Upload Cancel Writoad [Share More + | 0 0 |

Validate

| nen open OBS bucket URL and try. |
|---|
| React App × + |
| $ ightarrow$ C 🔺 Not secure \mid kt8795.obs-website.ap-southeast-2.myhuaweicloud.com $ ightarrow$ |
| Upload ID Card |
| Please Upload snapshot postfix with .PNG |
| Choose Files No file chosen Or Drag It Here. |
| ID Card No. |
| Full Name |
| Birthday |
| Address |

Click Choose Files and select thai-idcard test picture from C:\HOL-OCR\test-data\

| ส่งกระเหตุด | นาง เพ็ญศิริ | ปีดิกรกูล | |
|-------------|---------------------|-------------|------------|
| 64 | Netar Mrs P | hensiri | |
| | Balud 11 5 | 0 250R | 100 10 |
| CH | Date of Birth | 11 Mar. 196 | 5 |
| | | | 150 |
| inj 23/2 | 0 หมู่ที่ 6 ต.กะทู้ | | 148. 4. 11 |

Upload ID Card

Please Upload snapshot postfix with .PNG

| Choose Files thai-id-demo1.png Or Drag It Here. | |
|--|---|
| ID Card No. | Z |
| 8302 00044 00 9 | |
| Full Name | |
| ม.จ. เพ็ญศิริ ปิติกรกูล | |

To store data to database click Submit to backend DB

ID Card No.

8302 00044 00 9

Full Name

ม.จ. เพ็ญศิริ ปีติกรกูล

Birthday

11 มี.ค. 2508

Address

23/20 หมู่ที่ 6 ต.กะทู้ อ.กะพ้อ จ.ภูเก็ต

Issue Date

10 ม.ค. 2549

Expire Date

10 มี.ค. 2555

Submit to bactend DB

To valid the data store in RDS, you need to login to DAS, and query the table id_card_tbl.

| Data Admin Service | SQL Operations | Database Management | | Structure Management | Data Scheme Background | Tasks CloudDBA 1101 | Other Operations nine-kowit/ocr_u | user |
|---|----------------|--------------------------------|----------------------------|----------------------------|--|----------------------------|-----------------------------------|------|
| Home SQL Window X | | | | | | | | |
| Current Database: OCr_db 🕕 | Master | Instance Name: rds-ocr | 192.168.0.100:3306 C | haracter Set: utf8 | × | | Save Executed SQL Statements ⑦ | Q |
| Database: ocr_db </th <th></th> <th>SQL (F8) Tune SQL</th> <th>. Format SQL (F9)</th> <th>Execute SQL Plan (F</th> <th>6) SQL Favorites V</th> <th></th> <th>SQL Input Prompt 💿 🌔</th> <th>×</th> | | SQL (F8) Tune SQL | . Format SQL (F9) | Execute SQL Plan (F | 6) SQL Favorites V | | SQL Input Prompt 💿 🌔 | × |
| Please search by k Q C | 2 | FROM IN_COL | | | | | | |
| ► III id_card_tbl | | | | | | | | |
| | | ₽. | | | | | | |
| | Executed SQ | L Statements Messages | Result Set1 X | | | | Overwrite Mode | 0 |
| | The following | is the execution result set of | SELECT * FROM id_card_tbl. | ① This object has no prima | ary key and cannot be edited or export | ed in SQL format. Copy Row | Copy Column V Column Settings V | |
| | | idno | fname | birthday | addr | isdate | expdate | |
| | 1 | 8302 00044 00 9 | ม.ຈ. ເพິญศิริ ปีดีกรกูล | 11 มี.ค. 2508 | 23/20 หมู่ที่ 6 ด.กะทู้ อ. | กะพั 10 ม.ศ. 2549 | 10 มี.ค. 2555 | |
| | 2 | 8302 00044 00 9 | ม.จ. เพ็ญศิริ ปีดีกรกูล | 11 มี.ค. 2508 | 23/20 หมู่ที่ 6 ด.กะทู้ อ. | กะพั 10 ม.ค. 2549 | 10 มี.ค. 2555 | |
| | 3 | 1 7206 00071 41 5 | น.ส. สุขานัน นาคใหม่ | 2 n.e. 2535 | 470 หมู่ที่ 5 ด.ดอนเจดีย่ | í อ 14 ธ.ค. 2559 | 1 n.e. 2568 | |
| | 4 | 3 3199 00274 29 8 | 1ว เวชสวรรค์ ศิริประทุม | 11 พ.ค. 2511 | 99/1281 หมู่ที่ 1 ด.พรห | มณี 30 ต.ค. 2551 | 10 w.e. 2558 | |
| | 5 | 1 7206 00071 41 5 | น.ส. สุขานัน นาคใหม่ | 2 n.e. 2535 | 470 หมู่ที่ 5 ค.ดอนเจดีย่ | ía 14 ธ.ค. 2559 | 1 n.e. 2568 | |
| | | | | | | | | |

Conclusion

Congratulations on completed. You should now have a solid understanding of the Read Thai ID Card with HUAWEI CLOUD OCR and relate services.

Thank you for participating in the Huawei Cloud Hands-on Labs. Be sure to visit the other HOL to continue your lab experience.

After your finished all tasks then please kindly remove the resource as the step following this. Navigate to "Database" then "Relational Database Service" then "More" and click "Delete" on the DB Instance that your create as Picture below.

| RDS @ Atarm Rule Setting @ Usage Wizard [? User Guide Ruy DB1 Instance Management Renew Unsubscribe Change to Yearly/Monthly Reboot Management Renew Unsubscribe Change to Yearly/Monthly Reboot Search by Tag S C C Management Parameter Template Imangement Description DB In. JE Description DB In. JE DB Engine | налита Н | HUAWEI CLOUD Const | sole o Bangkok | Ŧ | | | | Se | arch | Q | More English | nine-kowit | 1 🖉 |
|--|----------|---|----------------|---|-------------------------------|---|--|---|--|---|--|--|---------|
| Instance Management Renew Unsubscribe Change to Yearly/Monthly Reboot Backup Management All DB engines DB instance name ▼ Enter a keyword. Q Search by Tag ≥ C C Parameter Template Name/ID E Description DB In. JE DB Engine JE Status Billing Mode Floating IP A. Operation Task Center rds-ald3 Z54e48b97a644a3da6a4f18d6d - Single MySQL 5.7.31 Available Pay-per-use Created on N 10.100.0.31 Log In View Metric More ▼ Data Attribuic Sensing rds-ocr C Single MpSQL 5.7.31 Available Pay-per-use Created on N 10.100.0.31 Log In View Metric More ▼ | = | RDS | Relational [| Database Service ⑦ | | | | | ② Alarm Rule Set | etting 🍳 Usage V | Vizard 🛛 🔂 User Guide | Buy DB Ir | istance |
| Created on O S2898c260743406b926660539c C 2 vCPUs 4 WySet 37.25 Created on O Valuate Created on O Valuate Created on O Valuate Created on O Valuate Create Read Replica Buy Same DB Instance Scale Storage Space Change Instance Scale Storage Space Change Instance Reate Backup Modify Parameter Reset Password Reboot Delete | | Instance Management Backup Management Parameter Template Management Task Center Recycling Management Data Admin Service | Renew | Unsubscribe Change to Name/ID 1 rds-add3 264-48b97a644a3da6a4f18d6d 264-48b97a644a3da6a4f18d6d 1 32898c260743406b926860559c 1 | fearly/Monthly [] [] All DI | Reboot B englines DB In_ JE Single 1 vCPU 2 | DB instance na DB Engine JE MySQL 5.7.31 | me • Enter. Status ② Available ③ Available | keyword. Billing Mode Pay-per-use Created on N Pay-per-use Created on O | Q Floating IP A. 10.100.0.31 192.168.0.100 | Search by Tag 😒 Operation Log In View Me Log In View Me Change to Yearly/Mo Create Read Replica Buy Same DB Instanc Scale Storage Space Change Instance Clas Change Type to Prim Create Backup Modify Parameter Reset Password Reboot Delete | ric More y tric More y tric More y r r s ary/Standby | |

Click "Yes" to delete

| Deleted DB instances cann operation. | ot be recovered. Exercise cau | ition when performing this |
|---|-------------------------------|--------------------------------|
| lf you want to retain data, | create a manual backup bef | fore deleting the DB instance. |
| DB Instance Name | DB Instance Type | Status |
| rds-ocr | Single | Available |
| | | |

Navigate to "Object Storage Service" then click on the Bucket that your create as picture below.

| HUAWEI | HUAWEI CLOUD G | | | | | | | | | | | More | | | 🖉 |
|----------|--------------------------|----|--|---------------|----------------|-------------------|--------|------------------------------------|--|-------------------------|-----------|-------------|----------|------------|--------|
| ≡ | Object Storage Service | | Object Storage Service | e ? Op | en Source Soft | ware Notice | | | | | | Create | Bucket | Buy OBS Pa | ackage |
| 6 | | | | | | | | | | | | _ | | | |
| æ | Object Storage | | OBS Browser+ 💆 D | ownload | obsutil | ⊥ Dow | nload | obsfs | ⊥ Download | Get SDK | | | | | |
| 000 | Parallel File System | | GUI-based management to | ool. It | A CLI tool. | It supports basic | | A tool for mou | nting parallel file | Obtain access keys (A | K and SK) | | | | |
| | My Packages | ° | supports batch upload of I files and folders. | large | operations | on buckets and ob | jects. | system. It enat objects in your | les you to operate local file system. | Visit OBS growth map | | | | | |
| | Data Express Service | do | Learn more | | Learn more | e | | Learn more | | | | | | | |
| 6 | CDN | æ | | | | | | | | | | | | | |
| 6 | Object Storage Migration | | | | | | | | | | | | | | |
| Ø | Service | 90 | | | | | | | | | _ | | | | |
| <u>т</u> | | | You can create 96 more bu | uckets on the | console. | | | | | | Ent | er a bucket | name. | Q | С |
| Ť | | | Bucket Name ↓Ξ | Storag | e Cla ↓Ξ | Region 🍞 🎝 | Us | ed Capac ↓Ξ | Objects 4 | E Created JF | Operation | i i | | | |
| C | | | kt8795-dev | Standa | ard | AP-Bangkok | 24 | .34 MB | 2 | Oct 17, 2020 09:46:10 G | Change S | torage Clas | s Delete | | |
| | | | kt8795-imgs | Standa | ard | AP-Bangkok | 15 | .14 MB | 39 | Oct 17, 2020 09:45:49 G | Change S | torage Clas | s Delete | | |
| | | | <u>kt879</u> fm | Standa | ard | AP-Bangkok | 1.3 | 38 MB | 25 | Oct 17, 2020 09:41:39 G | Change S | torage Clas | s Delete | | |

Click on Objects, and select all object, then click "Delete"

| HUAWE | HUAWEI CLOUD Console | | | | ine-kowit 🗗 |
|----------------|------------------------------|--|--|------------------------------|---------------|
| ≡ | Object Storage Service | Object Storage / kt8795 | | | |
| () () () | Overview Objects Permissions | Objects Deleted Objects Fragments Objects are basic units of data storage. In OBS, files and folders are treated as objects. Any file type can be uplo Upload Object Create Folder Upload Object Create Folder Restore Delete Change Storage Class | aded and managed in a bucket. Learn more | ter an object name prefix. | Q C |
| | Basic Configurations | M Delect Name J≡ Storage Class J≡ Size J≡ Encrypted | Restoration Status Last Modified | Operation | |
| 6 | Cross-Region Replication | Standard 55 byte No | Oct 17, 2020 14:06:23 | GM Download Share More • | |
| <u>ل</u> | Image Processing | precache-manifest.1b2c9a1e48cec Standard 752 byte No | Oct 17, 2020 14:06:23 | GM Download Share More 👻 | |
| 4) (P) | Inventories | service-worker.js Standard 1.15 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 🗸 | |
| 0 | | robots.txt Standard 67 byte No | Oct 17, 2020 14:06:23 | GM Download Share More 👻 | |
| | | manifest.json Standard 492 byte No | Oct 17, 2020 14:06:23 | GM Download Share More 🔻 | |
| | | logo512.png Standard 9.43 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 👻 | |
| | | logo192.png Standard 5.22 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 🗸 | |
| | | index.html Standard 2.63 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 👻 | |
| | | ✓ favicon.ico Standard 3.07 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 🔻 | 0 |
| | | sset-manifest.json Standard 1.20 KB No | Oct 17, 2020 14:06:23 | GM Download Share More 👻 | 9 0 |
| | | | | | |

Click "Yes" to confirm delete

| Are you sure you want to a - If versioning is disabled, the selected a - If versioning is enabled, the deleted di | delete the following data will be permanently delete ata can be recovered from Dele | 11 objects? ed. ted Objects. |
|---|---|------------------------------------|
| Dbject Name | Storage Class | Size |
| ∃ static | | |
| asset-manifest.json | Standard | 1.20 KB |
| avicon.ico | Standard | 3.07 KB |
| ndex.html | Standard | 2.63 KB |
| ogo192.png | Standard | 5.22 KB |
| ogo512.png | Standard | 9.43 KB |
| manifest.json | Standard | 492 byte |
| precache-manifest.1b2c9a1e48cec6a94c7536cf | Standard | 752 byte |
| robots.txt | Standard | 67 byte |
| service-worker.js | Standard | 1.15 KB |

Navigate to "Object Storage Service" then click "Delete" on the Bucket that your create as picture below.

| HUAWEI CLOUD | | | | | | | | | | More | English | | 1 |
|------------------------|-------------|---|-------------------------|---|--|--|--|---|-----------|--------------|----------|---------|---------|
| Object Storage Service | е | Object Storage Service | ⑦ Ope | en Source Soft | ware Notice | | | | | Create | Bucket | Buy OBS | Package |
| | 8 8 8 | OBS Browser+± Dor GUI-based management too supports batch upload of lar files and folders. Learn more | wnload ol. It 'ge | obsutil A CLI tooL operations Learn more | Download It supports basic on buckets and objects. 2 | obsfs A tool for mountil system. It enables objects in your loo Learn more | Download ng parallel file you to operate cal file system. | Get SDK Obtain access keys (Ał Visit OBS growth map | (and SK) | | | | |
| Service | | You can create 96 more buch | kets on the | console. | | | | | Ent | ter a bucke | name. | C | C |
| 4 | | Bucket Name JΞ | Storag | e Cla ↓Ξ | Region 𝔯 JΞ | Used Capac ↓Ξ | Objects J≣ | Created JF | Operation | n | | | |
| ® | | kt8795-dev | Standa | ard | AP-Bangkok | 24.34 MB | 2 | Oct 17, 2020 09:46:10 G | Change S | itorage Clas | s Delete | | |
| | | kt8795-imgs | Standa | ard | AP-Bangkok | 15.14 MB | 39 | Oct 17, 2020 09:45:49 G | Change S | itorage Clas | s Delete | | |
| | | kt8795 | Standa | ard | AP-Bangkok | 0 byte | 0 | Oct 17, 2020 09:41:39 G | Change S | itorage Clas | s Delgte | | |
| | | veeam-demo | Standa | ard | AP-Bangkok | 21.78 GB | 34 | Oct 10, 2020 14:31:01 G | Change S | itorage Clas | s Delete | | |

Click "Yes" remove the Bucket

| Are you sure | you want to delete the foll | owing bucket? | |
|--------------------|---|----------------------------|--|
| Deleted bucket can | not be recovered. Exercise caution when | performing this operation. | |
| | | | |
| Bucket Name | Storage Class | Region | |
| | | | |

Repeat step to other OBS Bucket.

Navigate to "API Gateway" > "Shared Gateway" > "API Publishing" > "APIs" then Select all API that your create as picture below then click "Take Offline"

| \$10 Наланта | HUAWEI CLOUD | | | | | | | | | | | | More English | | 23 |
|------------------------|--------------------|---|-----|--------------|---------------|-----------------|--------------------|-----------------|-----------|----------------|----------|---------------------------------|----------------|------------------|-----|
| ≡ | API Gateway | 4 | API | s (?) | You can creat | e 193 more APIs | ; (max. APIs: 200) | | | | | Create | API Import / | API Export | API |
| | | | | | | | | | | | | | | | |
| & | Shared Gateway | | | Auth | horize App | Publish | Take Offline | Jim Delete (| 0 | All API groups | • | All environments | in API name. Q | Tag Name ⇒ | С |
| .000 | API Publishing | ^ | | | | | | | | | | | | | |
| ~ | API Groups | | | \checkmark | Name | Environme | Visibility | Security Authen | API Group | Description | Tag Name | Last Updated | Operation | | |
| | APIs | | | \checkmark | API_ckhw | | Public | None | APIGroup | | | Oct 24, 2020 23:07:22 GMT+07:00 | Authorize App | Publish More 👻 | |
| 0 | Request Throttling | | | | API stored | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:55:35 GMT+07:00 | Authorize App | Publish More 🔻 | |
| 6 | Access Control | | | - | - | | | | | | | | | | |
| Ø | Environments | | | ~ | API_storedb | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:55:00 GMT+07:00 | Authorize App | Publish More 🔻 | |
| 4 | Signature Keys | | | \checkmark | API_obs_o | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:54:20 GMT+07:00 | Authorize App | Publish More 🔻 | |
| P | VPC Channels | | | ~ | API_obs | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:53:48 GMT+07:00 | Authorize App | Publish More 🔻 | |
| | Custom Authorizers | | | ~ | API_ocr_o | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:51:04 GMT+07:00 | Authorize App | Publish More 👻 | |
| | API Calling | ٠ | | ~ | API_ocr | RELEASE | Public | None | APIGroup | | | Oct 17, 2020 13:50:08 GMT+07:00 | Authorize App | Publish More 🔻 | |
| | | | | | | | | | | | | | | | |

Click "Yes" to confirm RELEASE resource

| caution when p | erforming this o | peration. | naccessible to apps an | u users in the environment. Exerci |
|---------------------|------------------|-------------|------------------------|------------------------------------|
| Environment RELEASE | | • | | |
| API Name | | Environment | Visibility | API Group |
| API_ckhw | | | Public | APIGroup_ocr |
| API_storedb_o | options | RELEASE | Public | APIGroup_ocr |
| API_storedb | | RELEASE | Public | APIGroup_ocr |
| API_obs_optic | ons | RELEASE | Public | APIGroup_ocr |
| API_obs | | RELEASE | Public | APIGroup_ocr |
| 5 v T | otal Records: 7 | < 1 2 > | | |

Click "Delete"

| HUAWB | HUAWEI CLOUD | Conso | ole | o Bang | kok • | | | | | | Search | | Q More | English nine- | kowit | ∣ ⊵23 |
|------------------|----------------------------------|-------|-----|-----------------------|-----------------------|-----------------|------------|-----------------|-----------|-------------|------------|--|--------------------------------|---------------|-----------------|-------|
| Ξ | API Gateway | 4 | API | s (?) | You can create 193 mo | re APIs (max. A | PIs: 200). | | N | | | | Create API | Import API | Ехро | t API |
| ۵ ۵ | Shared Gateway API Publishing | • | | Auth | orize App Publ | ish Tak | e Offline | Delete | All API | groups | ▼ All envi | ironments 💌 | Enter an API name | Q Tag Na | ame ≽ | С |
| MA ()) | API Groups | | | | Name | Environme | Visibility | Security Authen | API Group | Description | Tag Name | Last Updated | | Operation | | |
| 0 | APIs Request Throttling | | | | API_ckhw | | Public | None | APIGroup | | | Oct 24, 2020 23:07 Oct 17, 2020 13:55 | :22 GMT+07:00 :35 GMT+07:00 | Authorize App | Publish | More |
| 61 (2) | Access Control | | | | API_storedb | | Public | None | APIGroup | | | Oct 17, 2020 13:55 | :00 GMT+07:00 | Authorize App | Publish | More |
| \bigtriangleup | Signature Keys | | | ~ | API_obs_options | | Public | None | APIGroup | | | Oct 17, 2020 13:54 | :20 GMT+07:00 | Authorize App | Publish | More |
| P | VPC Channels | | | ✓ | API_obs | | Public | None | APIGroup | | | Oct 17, 2020 13:53 Oct 17, 2020 13:51 | :48 GMT+07:00 :04 GMT+07:00 | Authorize App | Publish Publish | More |
| | API Calling | * | | ~ | API_ocr | | Public | None | APIGroup | | | Oct 17, 2020 13:50 | :08 GMT+07:00 | Authorize App | Publish | More |
| | | | 1 | | | | | | | | | | | | | |

Type "DELETE" in textbox, then click "Yes"

| nter DELETE into the te | kt box below. | | |
|-------------------------|---------------|------------|--------------|
| DELETE | | | |
| API Name | Environment | Visibility | API Group |
| API_ckhw | | Public | APIGroup_ocr |
| API_storedb_options | | Public | APIGroup_ocr |
| API_storedb | | Public | APIGroup_ocr |
| API_obs_options | | Public | APIGroup_ocr |
| API_obs | | Public | APIGroup_ocr |
| 5 🔻 Total Recor | ds: 7 < 1 2 > | | |

Click "API Groups" > "More" > Delete

| MANNE | HUAWEI CLOUD | | | | Search | Q More English nine-kowit 🖉 |
|--------------|--------------------------------|---|---------------------------|---|---------------------------------|--|
| ≡ | API Gateway | 4 | API Groups ⑦ You can crea | ate 49 more API groups (max. API groups: 50). | | Create API Group |
| ۵ ۵ | Shared Gateway | | | | | Enter an API group name. Q |
| ,000, | API Publishing | | Name | Description | Created | Operation |
| 6 | APIs | | APIGroup_ocr | | Oct 17, 2020 13:48:39 GMT+07:00 | Manage API Edit More 🔻 |
| 0) Dj | Request Throttling | | | | | Manage Domain Name |
| Ø | Access Control Environments | | | | | Export API Delete (^{Im}) |
| 4 | Signature Keys | | | | | |
| P | VPC Channels | | | | | |
| | Custom Authorizers | * | | | | |
| | Part caung | | | | | |

Type "DELETE" in textbox, then click "Yes"

| Delete the APIs in t recovered. Exercise | he group before you delete the group. I caution when performing this operation | Deleted API groups cannot be |
|---|---|------------------------------|
| Enter DELETE into t | he text box below. | \searrow |
| APIGroup_ocr | | |

Navigate to "FunctionGraphs" > "Functions" > "Function List" then click on more "Operation" then click "Delete" that your create

| Мар инание и какие и | HUAWEI CLOUD Console | e o Bangkok 🔹 | | | Search | Q More Eng | glish nine-kowit 🚰 |
|---|------------------------|----------------------|--------------------|---------------|---------------------------|-------------------------------|----------------------|
| Ξ | FunctionGraph | Functions ⑦ | | | E | User Guide Create Func | tion Import Function |
| @ & | Dashboard | Apps (1) | Create Function Im | port Function | Fun | iction name 🔻 | QC |
| ,000, | Templates | Enter an app name. Q | Function name | Description | Configuration | Last modified | Operation |
| | Function List | bigg Default | upload_img | | Runtime Node.js 12.13 M | emor Oct 17, 2020 13:31:11 G | M Operation |
| 0 | Trigger List | Default app∠ | ocr | | Runtime Python 2.7 Mem | iory (I Oct 17, 2020 13:47:06 | Create Alarm Rule |
| 6 | Reserved Instances | | dbstore | | Runtime Python 2.7 Mem | iory (I Oct 24, 2020 23:19:05 | Delete |
| Ô | Dependencies | | | | | | |
| Φ | Tools | | | | | | |

Type "DELETE" in textbox, then click "ok" to confirm delete

| Delete Function | | | | | | | |
|-----------------|---|--|--|--|--|--|--|
| | Are you sure you want to delete this function? | | | | | | |
| | If the function is deleted, the associated code, configuration, aliases, and event source mappings will be permanently deleted, and only logs are retained. Deleted functions cannot be recovered. Exercise caution when performing this operation. | | | | | | |
| | Enter DELETE into the text box below. | | | | | | |
| Functio | on name | | | | | | |
| upload | upload_img | | | | | | |
| | OK Cancel | | | | | | |