

Data Admin Service

FAQs

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1 Product Consulting

1.1 How Is DAS Charged?

The DAS Enterprise Edition is charged. Other editions are free of charge.

1.2 Where Is SQL Execution Records Saved If I Enable This Function?

SQL execution records will be saved on the management hosts of the DAS service.

1.3 What Should I Enter in the Database Column to Log In to a PostgreSQL DB Instance on the DAS Console?

Enter `postgres`.

1.4 Will I Be Charged If I Enable Collect Metadata Periodically and Show Executed SQL Statements on the Add Login Page?

Currently, these functions are free of charge.

2 Connection Management

2.1 What Can I Do If My Database Login Fails?

Database Username or Password Errors

1. If error message **Access denied for user 'myuser'@'100.xxx.xx.xx' (using password: YES)** is displayed, the possible causes and solutions are as follows:
 - (1) Error cause: The MySQL database username or password is incorrect.
Solution:
Check whether the database username and password are correct. If they are correct, log in to the database using the client or CLI tool and run the **select * from mysql.user where user = 'myuser'** command to view user information. If there are users using 100.x.x.x IP addresses, user **myuser@100.x.x.x** is used for login. This is because **myuser@x.x.x.x** and **myuser@100.x.x.x** are different usernames, their passwords and permissions are independent of each other, and DAS can connect to databases via users with 100.x.x.x IP addresses only. Therefore, check whether the input password belongs to user **myuser@100.x.x.x**.
 - (2) Error cause: The IP address of the DAS server is not in the whitelist of the login user.
Solution:
Log in to the database using a client or CLI tool, and create a database user that DAS can connect to.

```
create user 'das'@'100.%' identified by 'password';
grant all privileges on *.* to 'das'@'100.%';
```
2. If error message **Command failed with error 18 (AuthenticationFailed): 'Authentication failed.' on server xxx.xxx.xx.xx:8635. The full response is { "ok" : 0.0, "errmsg" : "Authentication failed.", "code" : 18, "codeName" : "AuthenticationFailed" }** is displayed, the possible cause and solution are as follows:

Error cause: The DDS username or password is incorrect, or the input username and database do not match.

Solution:

Check whether the username and password are correct. Then check whether input username belongs to the database you want to log in to.

3. If error message **Login failed for user 'xxx'. ClientConnectionId:xxx** is displayed, the possible cause and solution are as follows:

Error cause: The Microsoft SQL Server database username or password is incorrect.

Solution:

Check whether the database username and password are correct.

4. If error message **Connection refused (Connection refused)** is displayed, the possible cause and solution are as follows:

Error cause: The PostgreSQL database username or password is incorrect.

Solution:

Check whether the database username and password are correct.

5. If error message **Host 'xxx.xxx.xx.xx' is not allowed to connect to this MySQL server.** is displayed, the possible cause and solution are as follows:

Error cause: The entered database user is not allowed to remotely log in to MySQL databases.

Solution:

Log in to the MySQL database locally using a client or CLI tool, and create a user with the remote login permission.

```
create user 'das'@'%' identified by 'password';  
grant all privileges on *.* to 'xxx'@'%';
```

Alternatively, specify only the IP address of the DAS server to log in to the database.

```
create user 'das'@'100.0.0.0/8' identified by 'password';  
grant all privileges on *.* to 'xxx'@'100.0.0.0/8';
```

Network Errors

1. If error message **Communications link failure The last packet sent successfully to the server was 0 milliseconds ago. The driver has not received any packets from the server** is displayed, the possible causes and solutions are as follows:

(1) Error cause: Access to this port is not allowed by the ECS security group.

Solution:

Click the ECS security group and check whether the self-built database port is included in the inbound rules.

If not, add an inbound rule that allows access to the port of the self-built database. You may set the source IP address to *0.0.0.0/0* or the DAS server IP address **100.0.0.0/8**.

(2) Error cause: Access to this port is not allowed by the ECS firewall policies.

Solution:

Remotely log in to the ECS and run the **iptables -S** command to view the iptables configuration. If the self-built database port is not included in the firewall whitelist, add an iptables rule or run the **systemctl stop iptables** command to disable the firewall to allow the access to this port.

2. If error message **The TCP/IP connection to the host 100.xxx.xx.xx, port xxx has failed.** is displayed, the possible cause and solution are as follows:

Error cause: The input port number of the SQL Server self-built database is incorrect.

Solution:

Check whether the input port number of the self-built database is correct and whether the port is included in the security group rule and firewall whitelist.

Permission Issues

1. If error message **Sorry, you do not have the permission to access DAS.** is displayed, the possible cause and solution are as follows:

Error cause: Your HUAWEI CLOUD account does not have the DAS Administrator permission.

Solution:

Grant the DAS Administrator permission by referring to [Creating a User and Granting Permissions](#).

2. If error message **This operation is not allowed because the login account only has the read-only permission. Grant the DAS Administrator permission.** is displayed, the possible cause and solution are as follows:

Error cause: Your HUAWEI CLOUD account does not have the DAS Administrator permission.

Solution:

Grant the DAS Administrator permission by referring to [Creating a User and Granting Permissions](#).

2.2 Connection Failure Scenarios

Scenario Analysis

There are three types of errors when you connect to a self-built database on the ECS:

- [Connection Timed Out Error](#)
- [Connection Rejected](#)
- [Connection Failure](#)

2.3 Connection Timed Out Error

Possible Causes:

- [ECS is stopped.](#)
- [The access to the port is not allowed by the ECS security group.](#)
- [The port is not allowed in the ECS iptables.](#)
- [During the remote access to the MySQL databases, DNS resolution is slow. As a result, the connection times out.](#)

ECS is stopped.

1. Click the name of the target ECS. The page providing details about the ECS is displayed.
2. If the ECS is stopped, restart the ECS. After it is restarted, connect to the database again.

The access to the port is not allowed by the ECS security group.

1. You are advised to select **TCP** for **Protocol/Application**, enter the same port number as the self-built database port, and set the IP address to **0.0.0.0/0**. For details about how to set security group rules, see [Configuring Security Group Rules](#).

Figure 2-1 Add Inbound Rule

Add Inbound Rule ⓘ

Security Group **default_securitygroup**

Protocol/Application	Port & Source	Description	Operation
TCP	Port: 8888 Source: IP addr... 0.0.0.0/0 ⓘ		Replicate Delete

+ Add Rule You can add 9 more rules.

OK Cancel

2. You are advised to select **TCP** for **Protocol/Application**, enter the same port number as the self-built database port, and set the IP address to **0.0.0.0/0**. For details about how to set security group rules, see [Configuring Security Group Rules](#).

Figure 2-2 Add Outbound Rule

Add Outbound Rule ⓘ

Security Group **default_securitygroup**

Protocol/Application	Port & Destination	Description	Operation
TCP	Port: 8888 Destination: IP addr... 0.0.0.0/0 ⓘ		Replicate Delete

+ Add Rule You can add 9 more rules.

OK Cancel

The port is not allowed in the ECS iptables.

1. Locate the target ECS on the ECS console, click **Remote Login** in the **Operation** column, and enter the username and password. After successful login, run the following command to check the iptables configuration:

iptables -S

```
-A INPUT -p tcp -m tcp --dport 49537 -j ACCEPT
```

 NOTE

The port next to **--dport** indicates the port that can be accessed.

2. You can add an iptables rule to allow access to the database port.
3. You can run the following command to disable the firewall to allow access to the database port.

```
systemctl stop iptables
```

During the remote access to the MySQL databases, DNS resolution is slow. As a result, the connection times out.

1. Locate the `/etc/my.cnf` configuration file of the MySQL database, enter the following content under `[mysqld]`, save the modification, and exit.

```
[mysqld]
skip-name-resolve
```

 NOTE

The default location of the MySQL configuration file is `/etc/my.cnf`. If the location is specified, you need modify it accordingly.

2. Restart the database service with `systemctl restart mysqld`. Then, connect to the database again.

2.4 Connection Rejected

Run the following command to remotely log in to the ECS:

```
netstat -anp | grep 3307
```

If the port is incorrectly set, no information is displayed, as shown in the following figure. In this case, rectify the port number.

```
root@szx1000424165 ~]# netstat -anp | grep 3307
root@szx1000424165 ~]#
```

2.5 Connection Failure

Run the following command to remotely log in to the ECS:

```
netstat -anp | grep 22
```

```
[root@szx1000424165 ~]# netstat -anp | grep 22
tcp        0      0 0.0.0.0:22          0.0.0.0:*          LISTEN    4949/sshd
```

If the obtained value is not the port number of the database service, rectify the port number.

 NOTE

The port number of the sshd service is **22**.

3 Usage

3.1 What Can I Do If Garbled Characters Are Displayed in the Exported Database Result Set?

CSV files exported from DAS are encoded in UTF-8, whereas Excel files are encoded in ANSI. Encoding inconsistency resulted in garbled characters.

You are advised to open the CSV file using a text editor and save the file in ANSI encoding.

3.2 What Are the Precautions for Connecting DAS to a Third-Party Client?

After operations are performed on a third-party client, refresh the DAS console to view the generated data.

3.3 What Are the Username and Password for DAS?

The username and password for adding a login are those used for creating the DB instance.

3.4 What Should I Do If Table Obtaining Times Out?

The possible cause is that the instance load is heavy. As a result, the table data collection on DAS times out. You are advised to kill a thread and perform the operation again.

3.5 How Do I Modify the Character Set Collation?

DAS does not support the SQL Server modification on the GUI. You can run commands to implement the modification.

Go to the SQL Window page of the database and run the following commands:

(In this example, the character set of the **test** database is set to simplified Chinese.)

```
use root
go
ALTER DATABASE test COLLATE Chinese_PRC_CS_AS
```

4 Service Support

4.1 Which Data Sources Does DAS Support?

Currently, DAS supports the management of MySQL, Microsoft SQL Server, DDS, PostgreSQL, GaussDB, and GaussDB(for MySQL) DB instances.

4.2 Does DAS Support Multi-Region Access?

Not supported. Currently, DAS and RDS must be in the same region. If you want to access RDS in other regions, you need to switch the region on the management console.

5 Product Consulting

5.1 Why Can't I Have Three Types of Permissions at the Same Time in an Approval Process?

This mechanism is used to prevent excessive permissions that may so that data security can be ensured.

5.2 How Are the SQL Statements Classified?

Figure 5-1 Classification of SQL statements

Query	Data Change	Structure Change	O&M	High-Risk Operation
select	delete	alter database	create user	drop database
explain	insert	alter function	drop user	drop event
show	replace	alter logfile group	grant	drop funtcion
	update	alter procedure	revoke	drop logfile group
	insert select	alter server	checksum table	drop procedure
		alter table	optimize table	drop server
		alter table space	set	drop table
		alter view	binlog	drop table space
		create database	kill	drop trigger
		create event	reset	truncate table
		create function		alter table drop
		create index		drop view
		create logfile group		
		create procedure		
		create server		
		create table		
		create table space		
		create view		
		drop index		

5.3 What Are the Differences Between Instance and Database Settings?

The following can be configured for both instances and databases:

- DBA and owner
- Security control items (single query of rows returned in the SQL window and whether DDL and DML operations can be executed in the SQL window)
- Approval process customization

Settings of these items for an instance will be synchronized to the database when the database is synchronized to the system for the first time. However, later modifications on the instance would not affect this database again.

5.4 What Can a Global OBS Bucket Do?

A global OBS bucket is used to store data backup and data export files generated by all the data change and export service tickets.

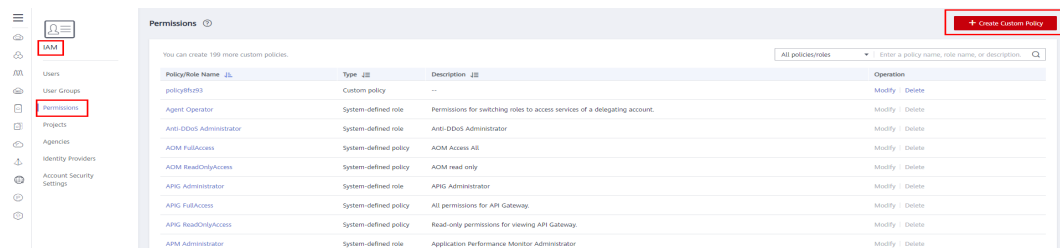
6 Usage

6.1 How Do I Grant Only the Permission to Use DAS to an IAM Account?

Step 1 Create a user-defined policy for DAS.

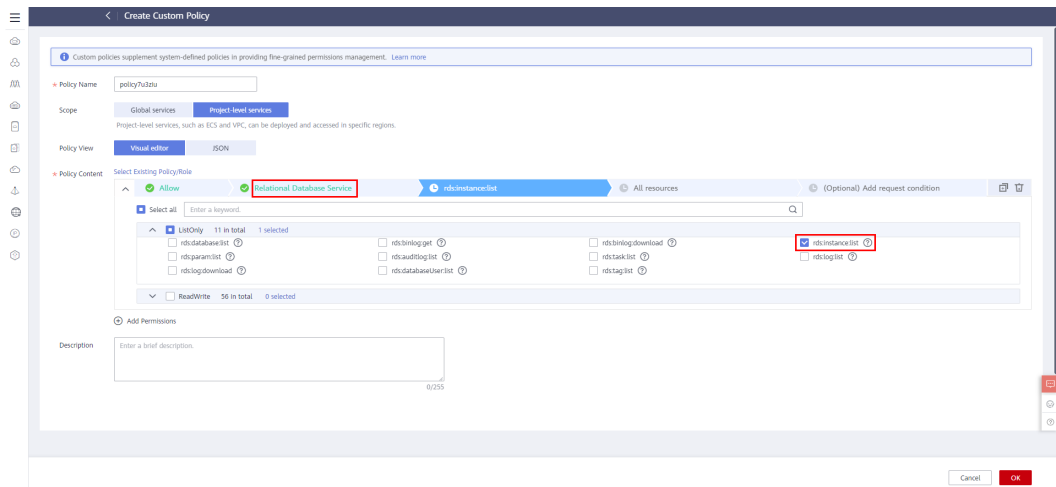
On the management console, choose **Service List > Management & Deployment > Identity and Access Management**. On the displayed page, select **Permissions** and click **Create Custom Policy**.

Figure 6-1 Identity and Access Management (IAM)



As shown in the following figure, the `rds:instance:list` permission of RDS and `das:connection:list` permission of DAS are granted.

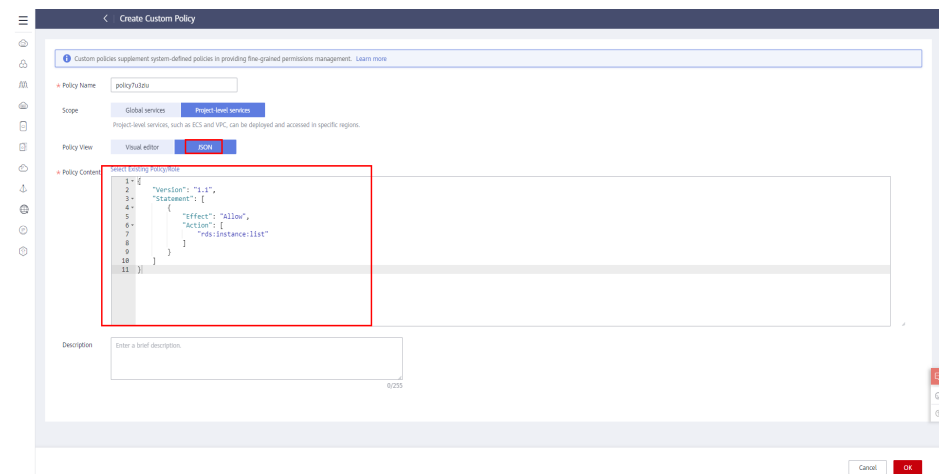
Figure 6-2 Creating a Custom Policy



NOTE

You can also select **JSON** for **Policy View** and enter the following statements in **Policy Content**.

Figure 6-3 JSON



```
{
  "Version": "1.1",
  "Statement": [
    {
      "Action": [
        "rds:instance:list"
      ],
      "Effect": "Allow"
    },
    {
      "Action": [
        "das:connections:list"
      ],
      "Effect": "Allow"
    }
  ]
}
```

Step 2 Create a DAS user group. Then, click **Manage Permissions** in the **Operation** column to select the custom permissions.

Figure 6-4 Creating a DAS user group

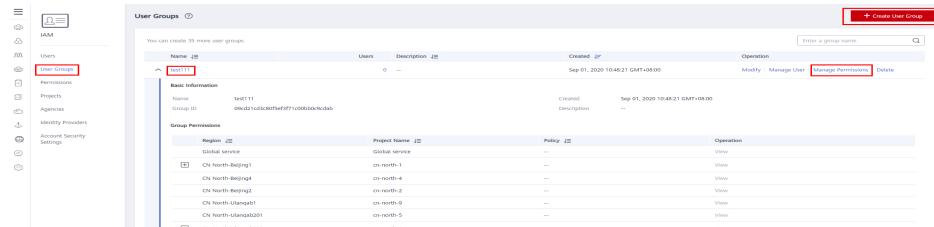
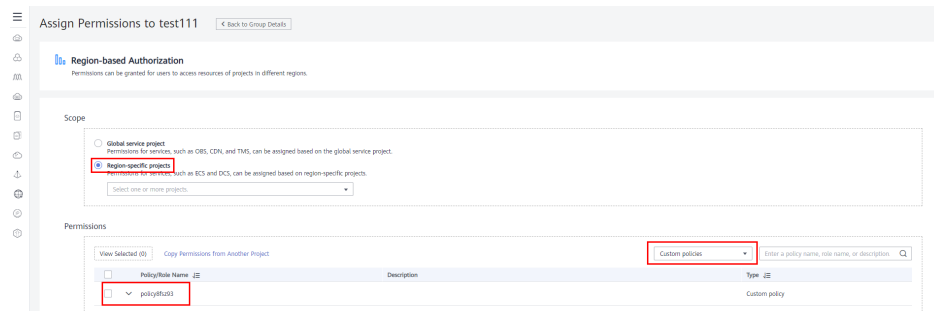
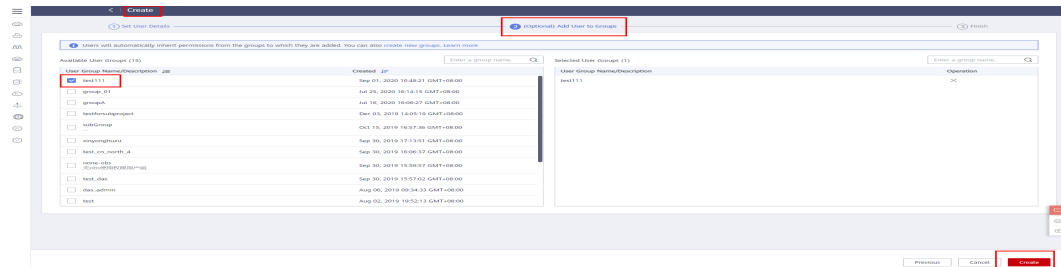


Figure 6-5 Selecting custom permissions



Step 3 Create an IAM account and add it to the user group.

Figure 6-6 Creating a user

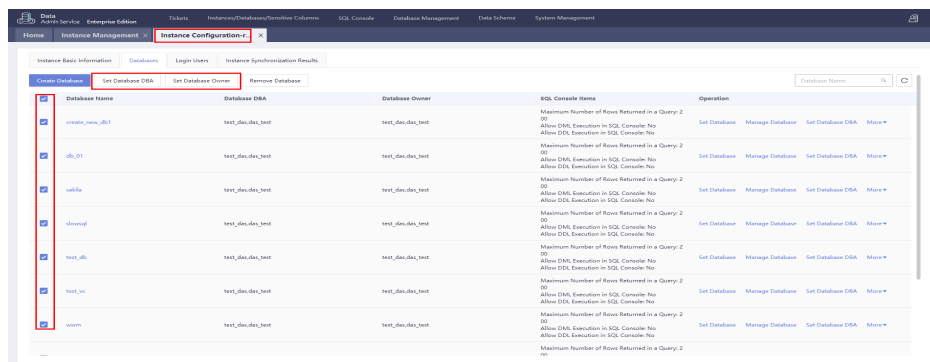


----End

6.2 How Do I Modify Permission, Security, and Approval Process Settings of Synchronized Databases in Batches?

- To set DBAs or owners, access an enterprise on the Enterprise Edition. Then choose **System Management > Instance Management**. On the displayed page, locate the target instance and click **Configure Instance** in the **Operation** column. Then, click the **Databases** tab.

Figure 6-7 Batch Settings



- To configure security control items and approval process, synchronize the instance modifications to existing databases.

Figure 6-8 Editing instance basic information

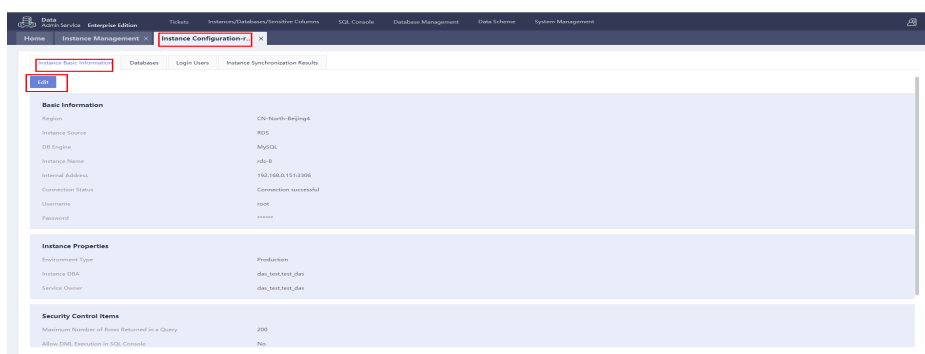
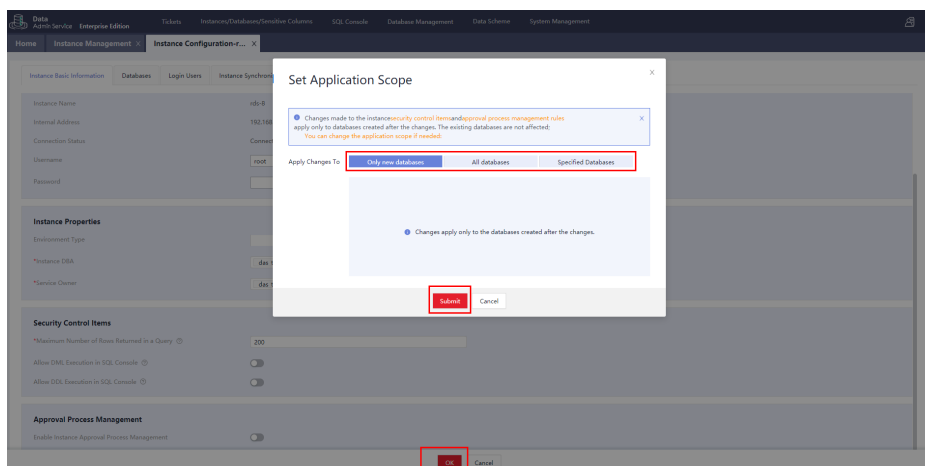


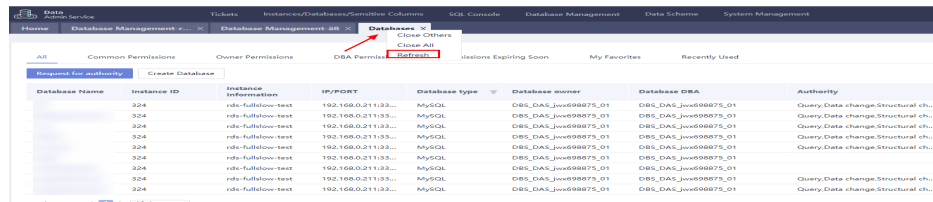
Figure 6-9 Confirming modification scope



6.3 How Do I Refresh Only a Tab Page Instead of the Entire Browser Page?

Right click on the tab page name and click **Refresh**

Figure 6-10 Refreshing a tab page



A Change History

Released On	Description
2020-12-30	This issue is the seventh official release, which incorporates the following change: Added an FAQ about product usage.
2020-09-27	This issue is the seventh official release, which incorporates the following change: Added FAQs about product consulting and usage (enterprise edition).
2020-08-18	This issue is the sixth official release, which incorporates the following change: Added FAQs about product consulting.
2019-11-01	This issue is the fifth official release, which incorporates the following change: Added the yearly/monthly billing for the DAS Advanced Edition.
2019-10-21	This issue is the fourth official release, which incorporates the following change: Added the guide for handling garbled characters caused by inconsistent formats of exported database result sets.
2018-12-21	This issue is the third official release, which incorporates the following change: Added analysis and troubleshooting of self-built database connection failure.
2018-11-22	This issue is the second official release, which incorporates the following change: Enabled the commercial use of DAS.
2018-06-25	This issue is the first official release.