Alibaba Cloud

Data Transmission Service

Data Integration

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Document conventions

Style	Description	Example
⚠ Danger	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	⚠ **Danger:** Resetting will result in the loss of user configuration data.
🔔 Warning	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	🔔 **Warning:** Restarting will cause business interruption. About 10 minutes are required to restart an instance.
🔊 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	🔊 **Notice:** If the weight is set to 0, the server no longer receives new requests.
? Note	A note indicates supplemental instructions, best practices, tips, and other content.	? **Note:** You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click **Settings> Network> Set network type**.
Bold	Bold formatting is used for buttons , menus, page names, and other UI elements.	Click **OK**.
Courier font	Courier font is used for commands	Run the `cd /d C:/window` command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	`bae log list --instanceid` *Instance_ID*
[] or [a|b]	This format is used for an optional value, where only one item can be selected.	`ipconfig [-all|-t]`
{} or {a|b}	This format is used for a required value, where only one item can be selected.	`switch {active|stand}`

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1.Create a data integration task

This topic describes the steps to create a data integration task for migration between ApsaraDB RDS for MySQL databases. The procedures of creating data integration tasks between other combinations of sources and targets are similar.

Prerequisites

The source and target ApsaraDB RDS for MySQL instances must reside in the supported regions, including China (Qingdao), China (Beijing), China (Zhangjiakou), China (Shenzhen), and China (Shanghai).

Context

The process of creating a data integration task is similar to the process of creating a data migration task. Instead of executing the task immediately, you can specify a recurrence pattern for the migration task to recur at specified intervals.

> ⑦ **Note** If a source table does not include constraints that make sure that every record is unique, such as PRIMARY KEY constraints or UNIQUE constraints, duplicates may occur in the target database.

Access permissions

When migrating the definitions of views, stored procedures, and functions, DTS uses the user specified in the `DEFINER` attribute as the `INVOKER` attribute.

DTS does not migrate database accounts. After the migration, you must grant users the permissions to access the migrated views, stored procedures, and functions in the target database.

Procedure

1. Log on to the Data Transmission Service console.
2. In the left-side navigation pane, click **Data Integration**.
3. In the region selector, select the region where the target database instance resides. For example, **China (Qingdao)**.
4. In the upper-right corner, click **Create Data Integration Task**.
5. Complete the settings as follows:

Section	Parameter	Description
N/A	Task Name	DTS automatically generates a default task name. You can enter a name to describe the task. The name does not have to be unique for each task.
	Instance Type	Select **RDS Instance**.
	Instance Region	Select the region where the source ApsaraDB RDS for MySQL instance resides.
	RDS Instance ID	Select the ID of the source ApsaraDB RDS for MySQL instance.

Section	Parameter	Description
Source Database	Database Account	Enter the database account on the source ApsaraDB RDS for MySQL instance.
	Database Password	Enter the password of the database account. Click **Test Connectivity** next to **Database Password** to verify that the DTS server can connect to the specified database system using the specified connection settings, database account, and password.
	Encryption	Select **Non-encrypted** or **SSL-encrypted**. If you want to select **SSL-encrypted**, you must enable SSL encryption for the RDS instance before you configure the data migration task. For more information, see Configure SSL encryption for an RDS MySQL instance.
Destination Database	Instance Type	Select **RDS Instance**.
	Instance Region	Select the region where the target ApsaraDB RDS for MySQL instance resides.
	RDS Instance ID	Select the ID of the target ApsaraDB RDS for MySQL instance.
	Database Account	Enter the database account on the target ApsaraDB RDS for MySQL instance.
	Database Password	Enter the password of the database account. Click **Test Connectivity** next to **Database Password** to verify that the DTS server can connect to the specified database system using the specified connection settings, database account, and password.
	Encryption	Select **Non-encrypted** or **SSL-encrypted**. If you want to select **SSL-encrypted**, you must enable SSL encryption for the RDS instance before you configure the data migration task. For more information, see Configure SSL encryption for an RDS MySQL instance.

6. In the lower-right corner of the page, click **Set Whitelist and Next**.

7. Complete the settings as follows:

Setting	Description
Migration Types	Select **Schema Migration** and **Full Data Migration**.
Scheduler strategy	Select an orchestration method. For example, **Duplicate mode, create new full replica to target** (create a new database every time).
Dispatch effective date	Select the start and end times of the effective period, and then click **Confirm**.

Setting	Description
Scheduling cycle	Select a recurrence period. For a daily recurring schedule, select the number of days as the interval. For a weekly recurring schedule, select the days of the week on which you want the migration task to run. Then, enter a specific time of the day when the migration task will run.
Task failure policy	Specify how DTS will handle a failed migration. You can click **View Scheduled Scheduling Time** to preview the planned occurrences based on the specified schedule
Available/Selected	In the **Available** list, select the objects to be migrated, and then click the right arrow icon to add them into the **Selected** list.

8. Click **Precheck**.

9. After the precheck is passed, click **Next**.

10. Follow the instructions to purchase an instance and complete the payment.

2.View the occurrences of a data integration task

This topic describes how to view the details of each occurrence of a data integration task. For each occurrence of a data integration task, Data Transmission Service (DTS) creates a subtask that corresponds to a data migration task.

Procedure

1. Log on to the Data Transmission Service console.

2. In the left-side navigation pane, click Data Integration.

3. In the region selector, select the region where the target database instance resides. For example, China (Qingdao).

4. Find the data integration task that you want to view the details of, and then click the ID of the task.

5. In the left-side navigation pane, click History Task.

   The list on the right side displays all past and ongoing occurrences of the data integration task.

6. Click View Details next to the occurrence that you want to check.

   You are then directed to the Full Data Migration page for the selected occurrence. The replicated objects are displayed in the list. The details displayed here are the same as the details that are displayed of a standard data migration task. You can navigate to other pages from the left-side navigation pane to view additional details of this data migration task. For more information, see View the progress of a data migration task and View performance metrics of full data migration.