

Set up DataSync Agent to share to Oracle

Gold

You can configure your Perspective DataSync Agent to share data from ServiceNow or Salesforce to an Oracle database by changing some additional [configurations in your agent.xml file](#).

Prerequisites

⚠ First, you will need to install a [DataSync Agent](#).

⚠ You will also need to [create a ServiceNow dynamic share/bulk share](#) or [create a Salesforce dynamic share/bulk share](#).

⚠ Make sure to [stop running your DataSync Agent](#) before making any Agent configuration changes.

⚠ Finally, you will need to create a database in Oracle that will store data replicated via the DataSync Agent.

NOTE: The Agent can [partitioning and table compression](#) as long as there is enough storage in the [tablespace](#) and the table is created with the same primary keys as the Agent would create it (i.e. sys_id and any [temporal](#) fields if applicable). For any questions, contact support@perspectium.com.

NOTE: The Agent requires six open cursors per ServiceNow table to be replicated as it uses prepared statements to ensure the most efficient processing possible. For each operation per table (insert, update, delete, query metadata) we use a prepared statement which is reused whenever the next similar operation needs to be executed against the same table. Each of these prepared statements uses a cursor. If we didn't use an open cursor, every transaction would be very inefficient because the Agent would need to re-establish the client/server connection and query the structure each time.

Procedure

To set up your DataSync Agent to share application data to an Oracle database, follow these steps:

1

Install and configure your DataSync Agent

Follow the steps to install the [DataSync Agent for ServiceNow](#) or the [DataSync for Salesforce Agent](#) and [make sure that your agent.xml file is configured correctly](#).

2

Access your agent.xml configuration file

Navigate to the directory where you saved your **agent.xml** file when installing your DataSync Agent.

3

Update database directives to point to Oracle

Open your **agent.xml** file in a text editing application. Then, locate the **<task>** directive(s) within your **<subscribe>** directive, and update the following database-related directives:

Directive	Value to enter
<database_type>	oracle
<database_server>	URL for your Oracle database
<database_port>	1521
<database_user>	Username used to access your Oracle database
<database_password>	Password used to access your Oracle database
<database_sid>	System Identifier (SID) used to access your Oracle database

NOTE: A TNS connect string can also be used to connect to your Oracle database. To configure your Agent in this way, enter the TNS connect string as the value for the **<database>** directive and delete the **<database_port>** and **<database_sid>** directives.

NOTE: If you are using **Oracle 12.2+** with the 12.2 JDBC driver, you can set the table and column names to support **Oracle 12.2's** larger **128 bytes limit** (prior to 12.2, the limit was 30 bytes meaning table and column names could only be up to 30 standard characters). To do so, follow these steps:

- Request the **databases.xml** file for your DataSync Agent by [contacting Perspective Support](#).
- Once you've received the **databases.xml** file, open the file in a text-editing application and locate the configurations for **<database_type>oracle</database_type>**.
- Within the parent **<database>** directive, locate the **<identifier_max_length>** directive and replace the value of **30** with preferred value up to 128. Do not enter any values greater than 128 as it will result in Oracle errors when trying to create tables and columns.
- Save the **databases.xml** file and put the file within the **conf** directory that was created upon [installation of your DataSync Agent](#).
- Download the [Oracle 12.2 JDBC driver jar](#), specifically the **ojdbc8.jar**. This jar will be named with the version number such as **ojdbc8-12.2.0.1.jar**.
- Replace the **ojdbc8.jar** within the **jars** directory that was created upon [installation of your DataSync Agent](#) with the version downloaded in the previous step.

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Add the <skip_database_creation/> directive

Locate the **<task>** directive(s) in your **<subscribe>** directive, and nest the following directive:

Directive	Description
<skip_database_creation/>	Bypasses the dynamic creation of the replicated database NOTE: This directive is added for an Oracle replication scenario with the DataSync Agent, as you must create the database used for replication in Oracle before configuring your DataSync Agent

Your **agent.xml** file should look similar to the example shown below:

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<config>
  <agent>
    <share/>
    <subscribe>
      <task instances="4">
        <task_name>OracleAgent_subscribe</task_name>
        <message_connection password="encrypted:vl0tU7lyu8N
/EFIJH85SSBtaIt7qEEfvqiqt9VZyYE=" queue="psp.out.replicator.oracletest" use_basic_consume="
false" user="exampleuser">https://example.perspective.net</message_connection>
        <instance_connection password="encrypted:vl0tU7lyu8N/EFIJH85SSPN9aF0P5
/YViVwPEVFcGW4=" user="test.user">https://myinstance.service-now.com</instance_connection>
        <handler>com.perspective.replicator.sql.SQLSubscriber</handler>
        <decryption_key>The cow jumped over the moon and the sun</decryption_key>
        <database_type>oracle</database_type>
        <database_server>localhost</database_server>
        <database_port>1521</database_port>
        <database_user>system</database_user>
        <database_password>encrypted:vl0tU7lyu8N/EFIJH85SSPN9aF0P5/YViVwPEVFcGW4=<
/database_password>
        <database_sid>orcl</database_sid>
        <skip_database_creation/>
        <database>psp_repl</database>
      </task>
    </subscribe>
    <max_reads_per_connect>4000</max_reads_per_connect>
    <polling_interval>5</polling_interval>
    <skip_message_set_processing/>
  </agent>
</config>
```

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Save your agent.xml file

Save the changes you made to your **agent.xml** file and close the file.

Run your DataSync Agent

After configuring your **agent.xml** file to support replication to your Oracle database, [start running your DataSync Agent](#) again.

Similar topics

- [Set up DataSync Agent to share to HP Vertica](#)
- [Database indexes](#)
- [Set up DataSync Agent to share to MySQL](#)
- [DataSync for ServiceNow \(Replicator\)](#)
- [Get started with the DataSync Agent](#)

Contact Perspective Support



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