Quest

SharePlex® 12.1

Installation and Setup Guide for Oracle on RDS

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Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

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About this Guide

This manual provides instructions for installing and setting up SharePlex on an Amazon RDS Oracle database.

Other SharePlex documentation

For the complete SharePlex documentation set, go to https://support.quest.com/shareplex/technical-documents.

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Overview and Requirements

The deployment of SharePlex for an Oracle database hosted on the Amazon RDS service is slightly different from deploying SharePlex for an on-premises Oracle database. In a typical on-premises database environment, a SharePlex administrator can install and set up SharePlex directly on the production database system. However, in an RDS environment, SharePlex cannot be installed on the underlying operating system, which is fully managed by Amazon.

To replicate to or from an Oracle database on RDS, you install SharePlex on a server that is external to the RDS deployment of the Oracle database, and then configure SharePlex to interact with the RDS database through a remote connection. Once SharePlex is deployed, it operates the same way as it does when capturing from, or posting to, an on premises source and target.

Requirements and Support

Understand the following when using SharePlex in an RDS environment.

SharePlex AMI

In all but one of the supported configurations for replication to or from an RDS database, you need to obtain a SharePlex AMI (Amazon Virtual Machine Instance). This instance is an Amazon Linux virtual machine, hosted on Amazon EC2, with SharePlex pre-installed. An Oracle client is included in the image. You launch the SharePlex instance from your EC2 account and then perform a few tasks to set up licensing and connectivity to the database.

For more information, see Configure a SharePlex AMI Instance on page 7.

Supported Oracle versions on RDS

Capture from RDS is supported for Oracle versions 11g R2 (supported 11g R2 versions are 11.2.0.4.v11 or later), 12c R1 (supported 12c R1 versions are 12.1.0.2.v7 or later), and 19c EE & SE2. Post is supported for all Oracle versions that are supported by RDS and SharePlex.

Supported Oracle features on RDS

Support of Oracle features on RDS is limited to the default option groups: **default:oracle-ee-12-1**, **default:oracle-ee-11-2**, **default:oracle-ee-19**, and **default:oracle-se2-19**.

Not supported

The following SharePlex or Oracle features are not supported for Oracle databases on RDS:

- Encryption of replicated data
- Compression of replicated data

- Replication of Oracle Spatial objects

SharePlex Configuration Tasks

This guide leaves off at the point where you have installed SharePlex and configured the environment to support connection to Oracle sources and targets in an RDS environment. There is still a little work to do before replication can start. To configure SharePlex to replicate your data, see the following guides:

SharePlex Administration Guide: This guide contains instructions for creating the configuration file that contains your replication rules, controlling and monitoring replication, activating replication, and other important tasks.

SharePlex Reference Guide: This guide contains detailed information about how to use each of the SharePlex commands and parameters.

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Configure a SharePlex AMI Instance

These instructions help you to create your SharePlex instance.

Prerequisites

- Create an Amazon Web Services (AWS) account and (recommended by Amazon) an Identity and Access Management User, or obtain the AWS credentials of an existing account that will be used for SharePlex.
- Have your SharePlex license key available.
- Each SharePlex AMI requires an incoming SSH rule that opens port 22 for incoming connections by users who will issue SharePlex commands or perform other replication-related administrative tasks. The **One-Click Launch** method provides a predefined security group with an existing incoming SSH rule that you can link to one or more IP addresses, or you can select a different security group. The **Manual Launch** method enables you to create a custom security group, or you can select an existing group. To create a custom security group before you start the launch, see the Amazon AWS documentation.
- SSH access to your SharePlex instance is allowed only by public key authentication using a *key pair*. The public key of the key pair is embedded in your SharePlex instance, and a private key is stored by you (the SharePlex user) in a file on the computer from which you will connect to SharePlex. You specify the file in the connection string. The **One-Click Launch** method requires you to select an existing key pair. The **Manual Launch** method enables you to create a key pair or select an existing one. To create a key pair, see the Amazon AWS documentation.

Create the SharePlex AMI instance

To find SharePlex on Amazon AWS:

1. Log on to Amazon Marketplace with your AWS account credentials.
2. In the Search box, type **SharePlex**.
3. Click the **SharePlex for Database Replication** link that is returned by the search. The SharePlex page is displayed, where you can compare costs based on various infrastructure options.
4. Click **Continue to Subscribe** at the top of the page.
5. You have the option of creating a SharePlex instance in either of the following ways:
    - **One-click launch:** Launches a default SharePlex instance, with limited customization options. The instance launches with a default name, which you can change after the launch process is completed.
    - **Manual Launch:** Provides additional customization options for your SharePlex instance, including the ability to specify a name and create a key pair or security group.

To create a SharePlex AMI instance with one click:

1. Select **One-Click**.
2. Specify the following settings. See the Amazon RDS help if you need more information about these features.

    Version: Select the SharePlex version that you want to run.

    Region: Select the Amazon region that will host the SharePlex instance.

    EC2 Instance Type: Select the virtual machine attributes for the SharePlex instance.

    VPC Settings: Select or create a virtual private cloud network and subnet for your SharePlex instance.

    Security Group: Select an existing security group, or select **Create new based on seller settings** to customize the existing SSH rule to your own IP addresses. **NOTE:** Any Amazon-generated **default** security groups shown in the list do not provide enough security for production replication across external networks.

    Key Pair: Select a key pair, which will be used as authentication when you log on to the SharePlex instance. **NOTE:** To log into SharePlex with th selected key pair, you must be in possession of the **.pem** file that contains the private key of that key pair.
3. Click **Launch with One Click**. You are notified that your instance of the software is being deployed on EC2. You can view the status of this instance on the EC2 console and assign it a name if desired.

To create a SharePlex AMI instance manually:

1. Select **Manual Launch**.
2. Click **Launch**.
3. Under **Version**, select the SharePlex version that you want to run.
4. Under **Launch**, find the Amazon region that will host the SharePlex instance, then click **Launch with EC2 Console**.
5. Select an instance type that matches your processing and storage needs, then click **Next: Configure Instance Details**.
6. Select among options that are related to the operation of the SharePlex instance.
7. Click **Next: Add Storage**.
8. Keep the default storage settings (these are adequate in most cases) or make any changes as necessary.
9. Click **Next: Add Tags**.
10. Click **Add Tag** then provide the following:
    - **Key column**: Enter your user name or some other value on which you can search and sort to find this SharePlex instance. Example: MyUserName
    - **Value column**: Enter the SharePlex instance name. Example: MySharePlexInstance
11. Click **Next: Configure Security Group**.
12. Select or create a security group that satisfies the SharePlex requirements. To create a rule, see the Prerequisites in these instructions.
13. Click **Next: Review and Launch**.
14. Review your instance specifications, and make any changes if needed.
15. Click **Launch**. The key pair dialog is displayed. Specify how you want to associate a key pair with the SharePlex instance:
    - If a key pair exists already, select **Choose an existing key pair**, then select the name.
    - To specify a new key pair, select **Create a new key pair**, type a name for the key pair file, then click **Download Key Pair**. The private key is downloaded to your computer in the form of a file with the extension of **.pem** (typically the Downloads folder on Windows).
16. Change the permissions on the**.pem** file to read-only. This is an Amazon requirement. Store the file in a safe place where you have access to it later
17. Click **Launch Instance**.
18. Click **View Instance**, then wait for the instance initialization to be completed.
19. Select the SharePlex instance by its assigned name tag, then wait until the **Status Checks** column shows a **Checks Passed** status.

Log in to the SharePlex Instance

1. If you do not have an SSH client on your system, download and install one.
2. Run the SSH client.
3. Always log on to the SharePlex AMI instance as the **ec2-user**. This user is the SharePlex Administrator. Use the following command:

   ssh -i ~/.ssh/*pem_file_name***.pem ec2-user@***IP_address/hostname*

   where:

   - *pem_file_name* is the name of the **.pem** file that you downloaded, which contains the private key of the security key pair.
   - *IP_address/hostname* is either the IPv4 public IP address or, if present, the host name that is mapped to this IP address in your domain name server or **/etc/hosts** file.

Add a License Key to the SharePlex Instance

To add a license key to the SharePlex instance:

1. Log on to the SharePlex instance.
2. Run the SharePlex license key utility with the following command at the Linux command prompt:

   /home/ec2-user/shareplex/proddir/install/splex_add_key
3. Choose a platform to add/update license key:

   Select the appropriate number from the following list of platforms to install the license key:

   ```
   1) Oracle
   2) PostgreSQL
   3) SQL Server
   4) MySQL
   5) MariaDB
   6) Snowflake
   7) Kafka
   8) Event Hubs
   9) JMS
   10) File - Local Storage
   11) File - Cloud Storage
   12) All Platforms
   q) Quit License Utility
   ```

   NOTE: To install a trial version of SharePlex, users need to select the **All Platforms** option.
4. Enter the key manually as received from Quest. Press **Enter** when finished entering the key.
5. Enter **q** to exit the utility.

3

Setup for On-Premises Source, RDS Target

SharePlex supports the following SharePlex configurations when the source database is on-premises and the target is an RDS database.

- SharePlex installed on-premises
- SharePlex AMI instance on EC2 cloud

SharePlex Installed On-Premises

In this scenario, Capture, running on premises, connects to the source database through a **bequeath** connection and the Post process connects to the RDS database through **TNS**.

To set up this configuration, install SharePlex on-premises in one of these ways:

- You can use your **production source server** to run all of the SharePlex replication components. In this setup, both source *and* target replication processes (and their queues) are installed on one server, the production server.

  NOTE: In a high-volume transactional environment, the buildup of data in the post queues and the presence of multiple Post processes may generate unacceptable overhead for a production system. In that case, you should use an intermediary server.

- You can use an **on-premises intermediary server** to run the Import and Post components (and the post queues). This method removes most of the replication overhead from the source server. For more information, see Post to PaaS cloud from an intermediary server section in the SharePlex Installation and Setup Guide.

NOTE: To view SharePlex system requirements when installed on premises, see the SharePlex Release Notes.

Install SharePlex

Install SharePlex on the **source** (and on the **intermediary** server, if using one for the Post process).

To install SharePlex on the source:

1. Log in to the system as the user that will be named as the SharePlex Administrator during this installation. This user will own the installation files and binaries.
2. If **sp_cop** is running, shut it down.

   ```
   sp_ctrl>  shutdown
   ```
3. Copy the installation file to a temporary directory where you have write permissions.
4. Grant executable permissions to the file.

   #**chmod 555***installation_file*
5. Run the **.tpm** file. If installing SharePlex in a cluster, run the installer from the primary node (the one to which the shared disk is mounted)

   # ***./installation_file***
6. Verify that the information shown on the first screen corresponds to the Oracle version and platform you are upgrading.

7. You are prompted for the following:

NOTE: These are basic installation instructions. For complete pre-installation and installation instructions for on-premises deployment, see the SharePlex Installation and Setup Guide.

Prompt	Input
Installation type	Select <**New Installation**>.
Product directory location (path)	Enter the path to the SharePlex installation directory. If the specified directory does not exist, the installer creates it. If the directory exists, it must be empty.
Variable data directory location	Specify an empty directory. The installer creates the specified directory if it does not exist. **IMPORTANT!** Do not install this directory into the SharePlex product directory.
SharePlex Admin group	Enter the DBA-privileged group to which the SharePlex Administrator user belongs, which will own the SharePlex binaries. If the default group of the SharePlex Administrator is **oinstall**, select any option, and make certain this user is listed under **oinstall** in the **etc/group** file.
TCP/IP port for SharePlex	Enter the port number to use for SharePlex TCP/IP communications. The default is 2100.
License key (do you have?)	Press **Enter** to accept the default of **Y** (yes). If you do not have a license, enter **N** (no).

Please specify platform for license key (select a number):	Select the appropriate number from the following list of platforms to install the license key:
	`1) Oracle`
	`2) PostgreSQL`
	`3) SQL Server`
	`4) MySQL`
	`5) MariaDB`
	`6) Snowflake`
	`7) Kafka`
	`8) Event Hubs`
	`9) JMS`
	`10) File - Local Storage`

Prompt	Input
	11) File - Cloud Storage 12) All Platforms q) Quit License Utility **NOTE:** To install a trial version of SharePlex, users need to select the **All Platforms** option.
License key	Enter the license key you received from Quest.

Create the tnsnames.ora file

To create the tnsnames.ora file:

1. On the source **or** the intermediary system (if using one) create a tnsnames.ora file with connection information for the **target** RDS database.

   IMPORTANT! The TNS alias cannot contain any dashes (-).

   The following is an example:

```
target =
    (DESCRIPTION =
       (ADDRESS = (PROTOCOL = TCP)(HOST = yourtarget.amazonaws.com) (PORT
= 1521))
       (CONNECT_DATA =
          (SERVICE_NAME=orcl)
       )
    )
```

Run Oracle Setup

To run Oracle Setup:

1. On the source, run **ora_setup** for the **source** database. See the directions for running Oracle Setup in Database setup for Oracle on page 28.
   - Reply **YES** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **NO** to "Are you setting up SharePlex for an RDS database?"
   - Reply **YES** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

2. On the source **or** intermediary (if using one) run **ora_setup** again, this time for the **target** database.
    - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
    - Reply **YES** to "Are you setting up SharePlex for an RDS database?" When you answer YES, it automatically configures Post to use a TNS connection and prompts for the RDS primary user, which has the required privileges to install SharePlex replication objects in the RDS database.
    - Reply **NO** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

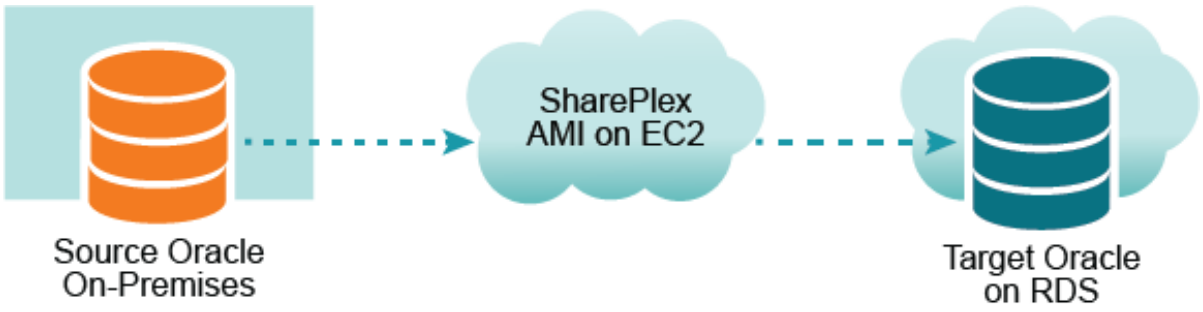
Set up routing in the configuration file

When you create your configuration file, use the name of the *local host* (where SharePlex is installed) in the routing map so that Post runs locally. The following is an example:

datasource:o.source

splex.demo_src splex.demo_dest sphost@o.target

SharePlex as an AMI instance on EC2 cloud



In this scenario, SharePlex runs as an Amazon Machine Image instance on the EC2 service. Capture connects to the source database through **TNS** and the Post process connects to the RDS database through **TNS**.

Obtain a SharePlex AMI image

To launch a SharePlex AMI instance, see Configure a SharePlex AMI Instance on page 7.

Log on to the SharePlex AMI instance

Always log on to the SharePlex AMI instance as the **ec2-user**. This user is the SharePlex Administrator. Use the following command:

ssh -i ~/.ssh/*pem_file_name***.pem ec2-user@***IP_address/hostname*

where:

- *pem_file_name* is the name of the **.pem** file that you downloaded, which contains the private key of the security key pair.

- *IP_address/hostname* is either the IPv4 public IP address or, if present, the host name that is mapped to this IP address in your domain name server or **/etc/hosts** file.

Create a tnsnames.ora file

On the SharePlex AMI instance, create a tnsnames.ora file with entries for the **source and target databases**.

IMPORTANT!

The **tnsnames.ora** file must be created in this directory: **/usr/lib/oracle/11.2/client64/network/admin**.

The TNS alias cannot contain any dashes (-).

The following are examples:

```
source  =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yoursource.amazonaws.com)  (PORT  =
1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
 target   =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yourtarget.amazonaws.com)  (PORT  =
1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
```

Run ora_setup

To run ora_setup:

1. On the SharePlex AMI instance, run **ora_setup** for the **source** database. See the directions for running Oracle Setup in Database setup for Oracle on page 28.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **NO** to "Are you setting up SharePlex for an RDS database?"
   - Reply **YES** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"
2. On the SharePlex AMI instance, run **ora_setup** again for the **target** database.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **NO** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

Configure remote capture

To configure remote capture:

1. On the SharePlex AMI instance, start **sp_cop**.
2. Start **sp_ctrl**.
3. Set the SP_OCT_OLOG_USE_OCI parameter to 1, which enables Capture to read the redo records through OCI, rather than directly from the redo files.

> **NOTE**: Enabling the SP_OCT_OLOG_RDS_MINER parameter is deprecated and no longer supported for Oracle 19c.

Set up routing in the configuration file

When you create the SharePlex configuration file, use the name of the EC2 host of the SharePlex AMI instance in the routing map so that Post runs on that host. The following is an example:

```
datasource:o.source

splex.demo_src      splex.demo_dest      shareplex_ec2_host.amazonaws.com@o.target
```

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Setup for EC2 source, RDS Target

In this scenario, SharePlex runs as an Amazon Machine Image instance on the EC2 service. Capture connects to the source database through **TNS** and the Post process connects to the RDS database through **TNS**.

Obtain a SharePlex instance

To obtain a SharePlex AMI instance, see Configure a SharePlex AMI Instance on page 7

Log on to the SharePlex AMI instance

Always log on to the SharePlex AMI instance as the **ec2-user**. This user is the SharePlex Administrator. Use the following command:

ssh -i ~/.ssh/*pem_file_name***.pem ec2-user@***IP_address/hostname*

where:

- *pem_file_name* is the name of the **.pem** file that you downloaded, which contains the private key of the security key pair.
- *IP_address/hostname* is either the IPv4 public IP address or, if present, the host name that is mapped to this IP address in your domain name server or **/etc/hosts** file.

Create a tnsnames.ora file

On the host of the SharePlex AMI instance, create a tnsnames.ora file with entries for the **source and target databases**.

> **IMPORTANT!**The **tnsnames.ora** file must be created in this directory: **/usr/lib/oracle/11.2/client64/network/admin**.
>
> **The TNS alias cannot contain any dashes (-).**

The following are examples:

```
source  =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yoursource.amazonaws.com)  (PORT  =
1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
 target   =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yourtarget.amazonaws.com)  (PORT  =
1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
```

Run ora_setup

To run ora_setup, perform the following steps:

1. On the SharePlex AMI instance, run **ora_setup** for the **source** database. See the directions for running Oracle Setup in Database setup for Oracle on page 28.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"
   - Reply **NO** to "Are you setting up SharePlex for an RDS database?"
2. On the SharePlex AMI instance, run **ora_setup** for the **target** database.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **NO** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

Set up remote capture

To set up remote capture, perform the following steps:

1. On the SharePlex AMI instance, start **sp_cop**.
2. Start **sp_ctrl**.
3. Set the SP_OCT_OLOG_USE_OCI parameter to 1, which enables Capture to read the redo records through OCI, rather than directly from the redo files.

NOTE: Enabling the SP_OCT_OLOG_RDS_MINER parameter is deprecated and no longer supported starting with Oracle 19c.

Set up routing in the configuration file

When you create the SharePlex configuration file, use the name of the EC2 host of the SharePlex AMI instance in the routing map so that Post runs locally. The following is an example:

```
datasource:o.source
splex.demo_src    splex.demo_dest   shareplex_ec2_host.amazonaws.com@o.target
```

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Setup for Source RDS, Target RDS

In this scenario, SharePlex runs as an Amazon Machine Image instance on the EC2 service. Capture connects to the source database through **TNS**, and the Post process connects to the RDS database through **TNS**.

Obtain a SharePlex instance

Obtain a SharePlex AMI instance. See Configure a SharePlex AMI Instance on page 7

Log on to the SharePlex AMI instance

Always log on to the SharePlex AMI instance as the **ec2-user**. This user is the SharePlex Administrator. Use the following command:

ssh -i ~/.ssh/*pem_file_name***.pem ec2-user@***IP_address/hostname*

where:

- *pem_file_name* is the name of the **.pem** file that you downloaded, which contains the private key of the security key pair.
- *IP_address/hostname* is either the IPv4 public IP address or, if present, the host name that is mapped to this IP address in your domain name server or **/etc/hosts** file.

Create a tnsnames.ora file

To create a tnsnames.ora file, perform the following steps:

1. On the SharePlex AMI instance, create a tnsnames.ora file with entries for the **source and target databases**.

   IMPORTANT!

   The **tnsnames.ora** file must be created in this directory: **/usr/lib/oracle/11.2/client64/network/admin**.

   The TNS alias cannot contain any dashes (-).

   The following are examples:

```
source  =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yoursource.amazonaws.com)  (PORT
=  1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
 target    =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yourtarget.amazonaws.com)  (PORT
=  1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
```

Run ora_setup

To run ora_setup, perform the following steps:

1. On the SharePlex AMI instance, run **ora_setup** for the **source** database. See the directions for running Oracle Setup in Database setup for Oracle on page 28.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **YES** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"
2. On the SharePlex AMI instance, run **ora_setup** for the **target** database.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **NO** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

Configure capture from RDS

To configure capture from RDS, perform the following steps:

1. On the SharePlex AMI instance, start **sp_cop**.
2. Start **sp_ctrl**.
3. On the SharePlex AMI instance, set the SP_OCT_OLOG_RDS_MINER parameter to **1**.

```
sp_ctrl>set param SP_OCT_OLOG_RDS_MINER 1
```

NOTE: Enabling the SP_OCT_OLOG_RDS_MINER parameter is deprecated and no longer supported starting with Oracle 19c.

Set up routing in the configuration file

When you create the SharePlex configuration file, use the name of the EC2 host of the SharePlex AMI instance in the routing map so that Post runs locally. The following is an example:

```
datasource:o.source

splex.demo_src      splex.demo_dest      shareplex_ec2_host.amazonaws.com@o.target
```

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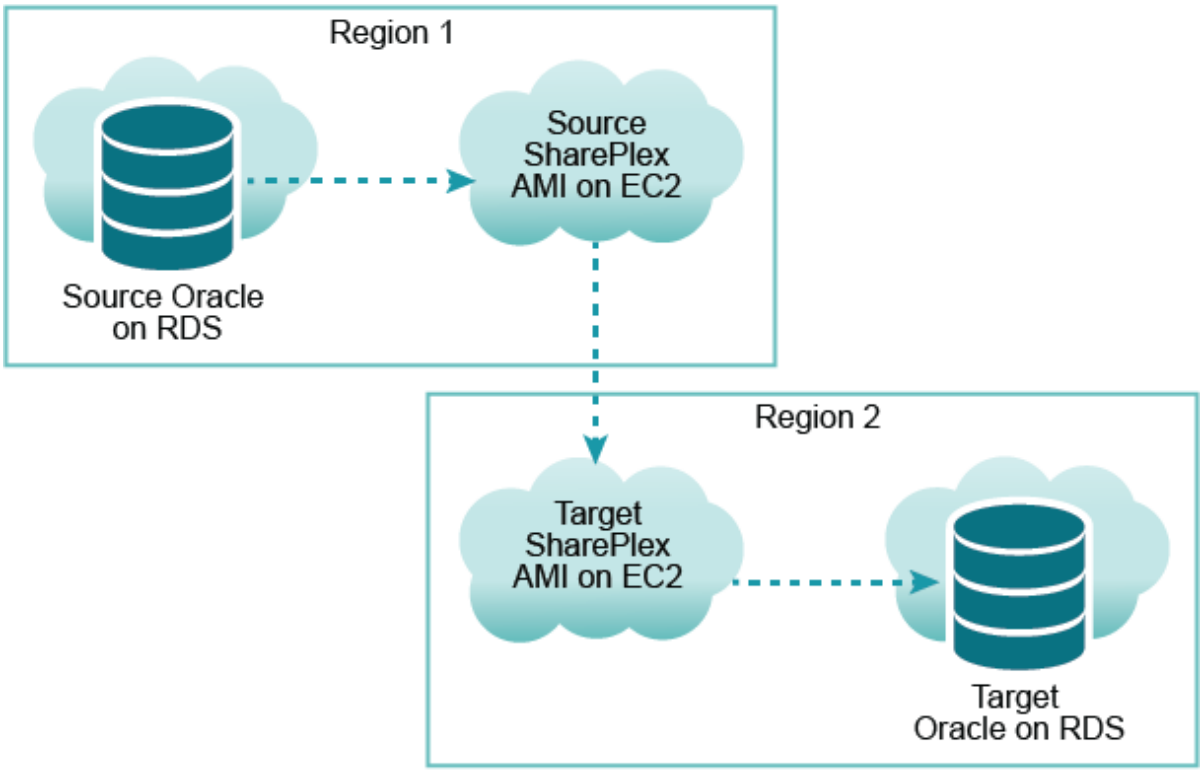
Setup for RDS Source, RDS Target in Different Regions

In this scenario, SharePlex runs as an EC2 Amazon Machine Image instance in two different AWS regions: one for the source database in region 1 and the other for the target database in region 2.

- Capture (in region 1) connects through TNS only to the **source** database to capture redo records through a remote connection.
- Post (in region 2) connects through TNS only to the **target** database to post the replicated operations through a remote connection.



Obtain SharePlex instances

Obtain two SharePlex AMI instances, one in region 1 to use as the source and the other in region 2 to use as the target. See Configure a SharePlex AMI Instance on page 7.

Log on to the SharePlex AMI instances

Always log on to the SharePlex AMI instance as the **ec2-user**. This user is the SharePlex Administrator. Use the following command:

ssh -i ~/.ssh/*pem_file_name***.pem ec2-user@***IP_address/hostname*

where:

- *pem_file_name* is the name of the **.pem** file that you downloaded, which contains the private key of the security key pair.
- *IP_address/hostname* is either the IPv4 public IP address or, if present, the host name that is mapped to this IP address in your domain name server or **/etc/hosts** file.

Create the tnsnames.ora files

IMPORTANT!
The **tnsnames.ora** file must be created in this directory: **/usr/lib/oracle/11.2/client64/network/admin**.

The TNS alias cannot contain any dashes (-).

To create the tnsnames.ora files, perform the following steps:

1. On the **source** SharePlex AMI instance, create a tnsnames.ora file with an entry for the **source database**.

   The following is an example:

```
source  =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yoursource.amazonaws.com)  (PORT
=  1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
```

2. On the **target** SharePlex AMI instance, create a tnsnames.ora file with an entry for the **target database**. The **tnsnames.ora** file must be created in this directory: **/usr/lib/oracle/11.2/client64/network/admin**.

   The following is an example:

```
target   =
    (DESCRIPTION  =
       (ADDRESS  =  (PROTOCOL  =  TCP)(HOST  =  yourtarget.amazonaws.com)  (PORT
=  1521))
       (CONNECT_DATA  =
          (SERVICE_NAME=orcl)
       )
    )
```

Run ora_setup

To run ora_setup, perform the following steps:

1. On the **source** SharePlex AMI instance, run **ora_setup** for the **source** database. See the directions for running Oracle Setup in Database setup for Oracle on page 28.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **YES** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"
2. On the **target** SharePlex AMI instance, run **ora_setup** for the **target** database.
   - Reply **NO** to "Will SharePlex install be using a BEQUEATH connection?"
   - Reply **YES** to "Are you setting up SharePlex for an RDS database?"
   - Reply **NO** to "Will the current setup for sid: *SID* be used as a source (including cases as source for failover or primary-primary setups)?"

Configure capture from RDS

To configure capture from RDS, perform the following steps:

1. On the **source** SharePlex AMI instance, start **sp_cop**.
2. Start **sp_ctrl**.
3. Set the SP_OCT_OLOG_RDS_MINER parameter to **1** to enable it.

```
sp_ctrl>set param SP_OCT_OLOG_RDS_MINER 1
```

NOTE: Enabling the SP_OCT_OLOG_RDS_MINER parameter is deprecated and no longer supported starting with Oracle 19c.

Set up routing in the configuration file

When you create the SharePlex configuration file, create it on the **source** SharePlex AMI instance. Use the name of the EC2 host of the **target** SharePlex AMI instance in the routing map, so that Post runs on that AMI. The following is an example:

```
datasource:o.source
splex.demo_src    splex.demo_dest   shareplex_ec2_host.amazonaws.com@o.target
```

7

Database setup for Oracle

Overview

Use the Database Setup utility for Oracle (**ora_setup**) to establish SharePlex as an Oracle user and create the required SharePlex database objects.

This setup utility creates the following:

- A SharePlex account
- Tables and other objects for use by SharePlex and owned by the SharePlex account
- Default connection for the SharePlex user

It is recommended that you review all of the content in this Database setup for Oracle section from the SharePlex Installation and Setup Guide before running this setup utility.

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We are More than Just a Name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation™.

Our Brand, our Vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

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- Chat with support engineers online
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