



Accelario

Data Virtualization

Module

User Guide
V17

March 2023

Contents

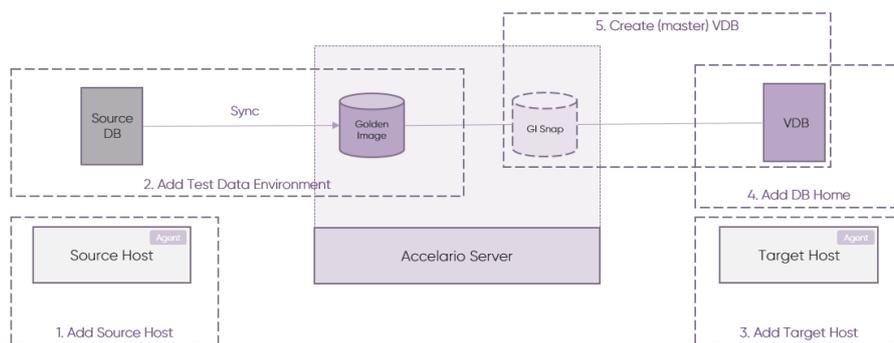
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1. Product Overview

The Data Virtualization Module lets you create and manage virtual databases (VDBs) that are used by data consumer users (e.g. testers, developers, and data analysts). Before data consumer users can use VDBs, it is necessary for the admin-user to do the following operations:

1. **Add Source Host:** define the connection to the server that hosts the source databases from which VDBs are created.
2. **Add Test Data Environment:** define access to the source database that resides on the source host and create a golden image (GI).
3. **Add Target Host:** define the connection to the server that hosts the VDBs.
4. **Add DB Home:** define access to the target database that resides on the target host from which VDBs are created.
5. **Create (master) VDB:** create and start a VDB on a golden image snapshot.
6. Assign the VDB to the data consumer users.



1.1. Source Host

A **source host** is a server that hosts the source databases. To access the source databases, it is necessary to configure the connection to the source host. The following operations can be done on a source host object:



Only an **admin-user** can do operations on a source host object.

1. Add a source host, i.e. configure the connection to the source host.
2. See info about a source host.
3. Remove a source host.

For more information, see [Source Management](#) for Oracle users.

For more information, see [Source Management](#) for PostgreSQL users.

For more information, see [Source Management](#) for MS-SQL users.

1.2. Source Database

A **source database** can be a production database, a Data Guard Standby database, or a source database replica (for a LIVE GI) that resides on a source host.



Source databases are created and managed with the test data environment object.

1.3. Golden Image

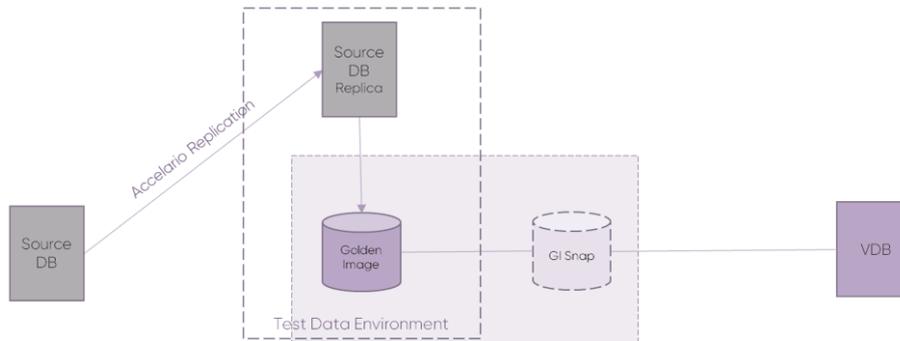
A **golden image** is a full synchronized copy of the source database files. A golden image is used to create VDBs. Golden images reside on the Accelario server.



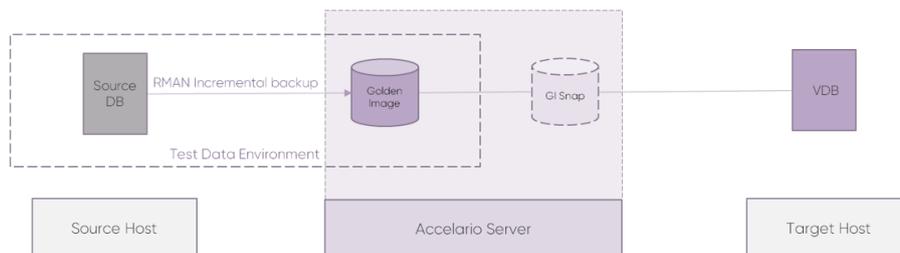
Golden images are always created on the primary storage pool.

There are four types of golden images:

1. **LIVE GI** – a golden image that is created and synchronized from a source DB replica. **Accelario Replication** is usually used to create the source DB replica. The LIVE GI is continuously synchronized.

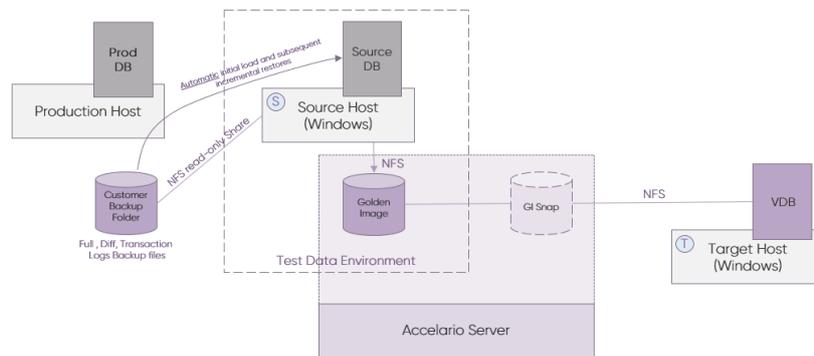


2. **RMAN GI** – a golden image that is created and synchronized using RMAN incremental forever backup mechanism. RMAN incremental backups can be automatically scheduled or a **GI Refresh** operation is used to do a manual backup.



3. **RMAN STANDBY GI** – a golden image that is created and synchronized using RMAN incremental forever backup mechanism from a Data Guard standby source database. RMAN incremental backups can be automatically scheduled or a **GI Refresh** operation is used to do a manual backup.

4. **Native SQL Server Backup GI** – provide automatic initial load and refresh using the customer Native SQL Backup files. The initial load and subsequent restores are scheduled automatically by the system.



1.3.1. Golden Image Snapshots

GI snapshot (GI snap) – a read/write point-in-time copy of the golden image. It uses minimum storage space because the unchanged data is accessed directly from the golden image. A GI snap can be created manually or can be scheduled.

Managing GI snapshots for a RMAN GI and a RMAN Standby GI

- > At the end of a successful refresh operation, a snapshot is automatically added.
- > A refresh operation is done each time a scheduled snapshot is added. Before the snapshot is added, the system automatically does an RMAN incremental backup operation.



Golden images are created with the test data environment object.

1.4. Test Data Environment

A **test data environment** includes the access definition to one source database and a GI. The following operations can be done on a test data environment object.



Only an **admin-user** can do operations on a test data environment object.

1. Create test data environment – a wizard to make a test data environment:
 - a. Select the golden image type
 - b. Select the source host
 - c. Configure the GI snapshot policy – activate snapshots, schedule a start point and the interval to make snapshots, plus set the snapshot retention policy
 - d. Define access to a source database
 - e. For a RMAN GI and a RMAN Standby GI, select the **Refresh immediately** checkbox option to make an initial full copy of the source database files to the golden image and activate it (recommended)
2. Modify test data environment parameters.
3. See test data environment source database info.
4. Remove test data environment.



Only environments that do not have configured VDBs can be removed

5. Refresh GI.



Additional GI operations are available with the golden image object which is shown in the VDB management work area.

For more information, see [To create a test data environment](#): for Oracle users.

For more information, see [To create a test data environment](#): for PostgreSQL users.

For more information, see [To create a test data environment](#): for MS-SQL users.

1.5. GI Management

After a golden image is made and started with the Create Test Data Environment operation, the golden image is shown in the VDB management work area. The following operations can be done on the three types of GI objects:

1. Add or remove a snapshot manually.
2. Create a VDB on a GI point-in-time snapshot.
3. Modify the GI parameters.
4. See GI info about the GI.

1.5.1. Oracle

Additional operations available to do for a RMAN GI and RMAN Standby GI:

1. Refresh GI – executing an RMAN incremental recovery. After a successful refresh, a new snapshot is added.
2. Remove GI object – only a GI that does not have configured VDBs can be removed.
3. Activate GI - when creating an RMAN GI without selecting **Refresh immediately** the GI is in deactivated mode. Use this operation to activate it.

Additional operations available to do for a LIVE GI:

1. Activate LIVE GI – when the LIVE GI is created it cannot be activated automatically. It is only possible to do this, after an initial manual copy of the source database is made by the system administrator. Only after the Oracle data base files are moved and the source database is up is it possible to activate the LIVE GI.
2. Deactivate GI - before a GI object can be removed it is necessary to remove its first snapshot. Only after the first snapshot is successfully removed is it possible to deactivate the GI.

1.5.2. PostgreSQL

Additional operations available to do for a LIVE GI:

1. Activate LIVE GI – when the LIVE GI is created it cannot be activated automatically. It is only possible to do this, after an initial manual copy of the source database is made by the system administrator. After the PostgreSQL data base files are moved and the source database is up is it possible to activate the LIVE GI.
2. Deactivate GI - before a GI object can be removed it is necessary to remove its first snapshot. Only after the first snapshot is successfully removed is it possible to deactivate the GI.

1.5.3. MS-SQL

Additional operations available to do for a Native SQL Server Backup GI:

1. Activate Native SQL Server Backup GI – when the Native SQL Server Backup is created it cannot be activated automatically. It is only possible to do this, after an initial manual copy of the source database is made by the system administrator. After the MS-SQL data base files are moved and the source database is up is it possible to activate the Native SQL Server Backup.
2. Deactivate GI - before a GI object can be removed it is necessary to remove its first snapshot. Only after the first snapshot is successfully removed is it possible to deactivate the GI.

Additional operations available to do for a LIVE GI:

1. Activate LIVE GI – when the LIVE GI is created it cannot be activated automatically. It is only possible to do this, after an initial manual copy of the source database is made by the system administrator. After the MS-SQL data base files are moved and the source database is up is it possible to activate the LIVE GI.
2. Deactivate GI - before a GI object can be removed it is necessary to remove its first snapshot. Only after the first snapshot is successfully removed is it possible to deactivate the GI.

1.6. Target Host

A **target host** is a server that hosts the VDBs that are used by the data consumer users. The following operations can be done on a target host:



Only an **admin-user** can do operations on a target host object.

1. Add a target host - define access to the target host.
2. See info about a target host.
3. Remove a target host.

For more information, see [Target Management](#) for Oracle users.

For more information, see [Target Management](#) for PostgreSQL users.

For more information, see [Target Management](#) for MS-SQL users.

1.7. DB Home

A DB Home is the target database that is used to initiate VDB instances. A target database is defined by its DB Home. The following operations can be done on a DB Home object:



Only an **admin-user** can do operations on a DB Home object.

1. Add a DB Home - set the parameters to access to the target database.
2. See info about a target host.
3. Remove a target host.

For more information, see [To add a DB Home](#): for Oracle users.

For more information, see [To add a DB Home](#): for PostgreSQL users.

For more information, see [To add a DB Home](#): for MS-SQL users.

1.8. Managing VDBs

VDBs are the primary function to use the Data Virtualization Module. Because VDBs use snapshots as their database file containers they use minimal space and can be created quickly (usually in few minutes).



When an Oracle VDB is first created, the time that is necessary to create it is longer than the time necessary to create the other VDBs on the same GI. This is because when the first VDB is created, an additional Oracle recovery process is done to merge all the archive logs that were generated during the initial RMAN recovery process.

The following operations can be done on a VDB object:



An **admin-user** and a **non admin-user** can do operations on a VDB object.

1. Create VDB – a VDB can be created either on a golden image snapshot (we refer to it as **master VDB**) or on a VDB snapshot (we refer to it as **child VDB**). When a VDB is created, it is necessary to set the following parameters:
 - a. **Start Immediately** – after the VDB is created it will be started automatically and can be used by data consumer users
 - b. **Start as RAC** – start the VDB as a RAC instance
 - c. **Target DB Home** – select the target database that the VDB will be executed from by selecting the required DB Home object
 - d. **Snapshot Policy** – activate snapshots, schedule a start point and the interval to make snapshots, plus set the snapshot retention policy
 - e. **Advanced Parameters** – ability to define Oracle specific parameters and pre/post scripts
2. Start/Stop VDB – a VDB can be easily started or stopped.
3. Recover VDB to any point-in-time snapshot – a VDB can be rolled forward/backward to an existing point-in-time snapshot. This operation can be executed only on a stopped VDB. When rolling backwards, all snapshots after the specified snapshot are deleted.
4. Recover to first point-in-time snapshot – used to roll backward to the original VDB point-in-time (i.e. the time that it was created). All snapshots except the first one will be deleted.
5. Add/remove snapshot manually.
6. Modify VDB parameters.
7. See info about the VDB.
8. Remove VDB object – only stopped VDBs that do not have child VDBs can be removed.

For more information, see [VDB Management](#) for Oracle users.

For more information, see [VDB Management](#) for PostgreSQL users.

For more information, see [VDB Management](#) for MS-SQL users.

1.9. Shared Snapshots

Non-admin users can share snapshots with other non-admin users that belong to a different User Role. It is permitted only for User Roles that have authorization to the same Test Data Environment. **Shared Snapshots** are used to share a point-in-time copy of a VDB between different user groups (e.g. Dev and QA) for development and testing purposes.

The owner of a snapshot can do the following operations:

1. **Share** - share any of its GI/VDB snapshot with another User Role
2. **Unshare** - unshare its own shared snapshot

The receiver of a snapshot can do the following operations:

1. **Create VDB** - create VDB on the shared snapshot that was received
2. **Unshare** - unshare a shared snapshot that was received

For more information, see [Sharing Snapshots](#) for Oracle users.

For more information, see [Sharing Snapshots](#) for PostgreSQL users.

For more information, see [Sharing Snapshots](#) for MS-SQL users.

1.10. Managing Duplicates

Duplicates are a full point-in-time copy of the golden image or of a VDB file container. It uses the full capacity of the source database. It is treated as a mutable golden image with one snapshot from which VDBs and duplicates are created. Duplicates reside on the Accelario server.



If a secondary storage pool exists, duplicates will automatically be created on this storage pool. Otherwise duplicates are created on the primary storage pool.

The following operations can be done on a duplicate object:

1. Create Duplicate – from any GI, VDB, or duplicate snapshot.
2. Modify Duplicate – modify all the GI parameters.
3. See info about the Duplicate.
4. Remove Duplicate object – only a GI that does not have configured VDBs can be removed.

1.11. Users and Roles

The Data Virtualization Module uses a role-based user management system. Users and roles are divided into the following categories:

Admin user – can manage all the system resources including source hosts, test data environments, target hosts, target databases, and VDBs. An **admin-user** can also do user management, storage pool management, monitoring, and troubleshooting.

Non-admin user – can manage only the VDBs to which they have been assigned.

User authentication – an **admin-user** and a **non-admin user** can be authenticated locally or remotely with Active Directory.

User Authorization – a role-based mechanism is used to assign resources for a **non-admin user**. A **non-admin user** is authorized to use and manage VDBs defined on a group of assigned golden images and assigned target hosts. A **non-admin user** is only permitted to do the operations on the VDBs to which they have been assigned.

The following operations can be done on users and roles:



Only an **admin user** can do operations on users and roles.

- > Create and modify users
- > Create and modify roles

For more information, see [Users Management](#).

1.12. Storage Pool Management

Storage pools are the storage containers of the Accelario server. These storage pools store the golden images and duplicates.

It is necessary for the administrator to create a **primary storage pool** to store all the golden images and duplicates. The administrator can also create a **secondary storage pool** to store all the duplicates. The **secondary storage pool** can be configured on a different storage device, thus it can optimize storage performance.

The following operations can be done on a target host:



Only an **admin-user** can do operations on a target host object.

- > Create secondary storage pool.
- > Expand storage pool.
- > Reduce storage pool.
- > See info about the storage pool.
- > Remove (secondary) storage pool.

For more information, see [Storage Pool Management](#).

1.13. System Setup

The **System Setup** is used to define the system setup such as SMTP, Active Directory, etc. The following operations can be done in the **System Setup** window:



Only an **admin-user** can do operations in the **System Setup** window.

- > Setup the Active Directory Authorization.
- > Configure the SMTP.
- > Configure Oracle advanced parameters.
- > Configure Accelario Server Host/IP.

For more information, see [System Setup](#).

1.14. Event Viewer

Used to see and save all user events. The following operations can be done on Events:



An **admin-user** and a **non admin-user** can do operations on Events.

- > See, filter, and search all user events.
- > Save all user events to a file.

For more information, see [Event Viewer](#).

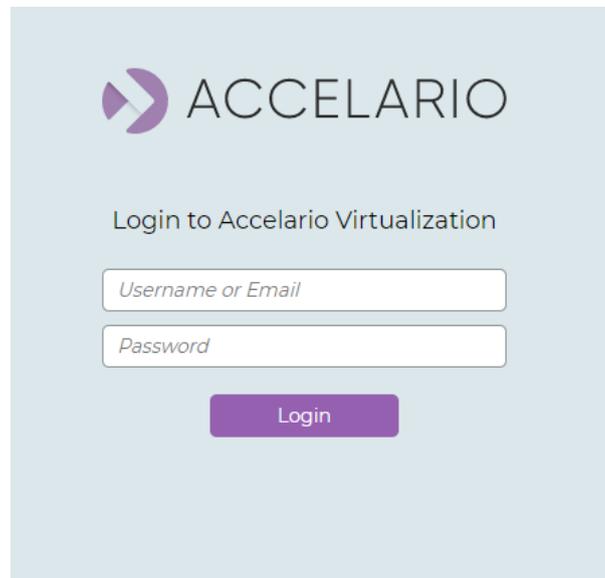
2. Login to the Data Virtualization Module

To login in to the Data Virtualization Module:

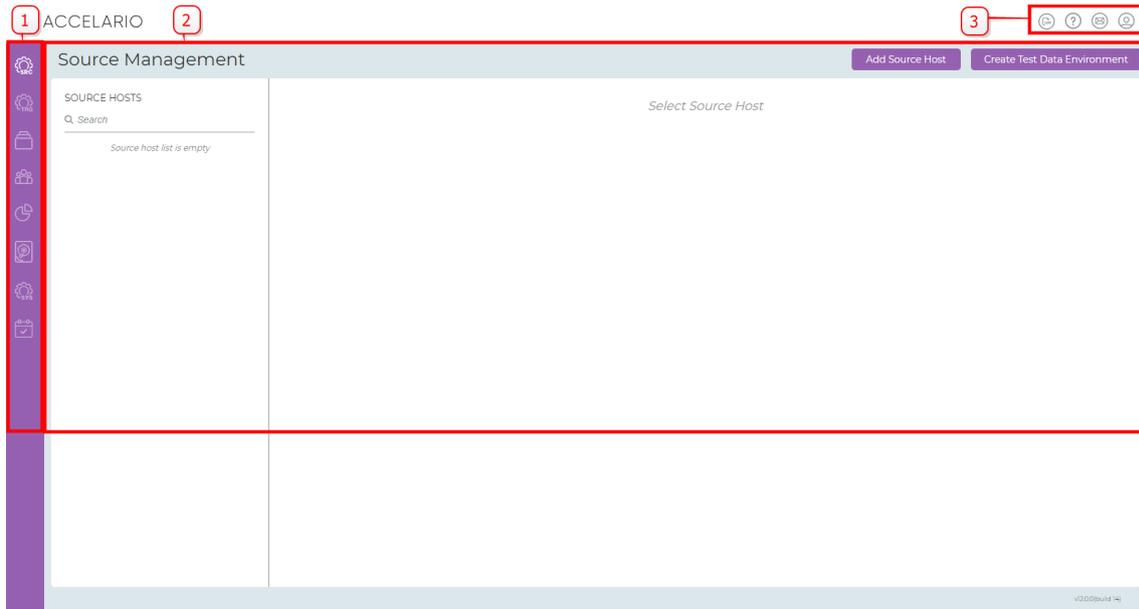


Your username and password are set by the admin user.

1. Enter your **Username** or **Email**.
2. Enter your **Password**.
3. Click **Login**.

A screenshot of the Accelario login interface. At the top left is the Accelario logo, a purple arrow pointing right. To its right is the word "ACCELARIO" in a bold, sans-serif font. Below the logo and name is the text "Login to Accelario Virtualization". Underneath this are two input fields: the first is labeled "Username or Email" and the second is labeled "Password". Below the input fields is a purple button with the text "Login" in white.

3. Getting to Know the GUI



#	Item	Description
1	Navigation bar	Used to put content in the work area
2	Main work area	Main work area where you do tasks
3	Task bar	System tasks

The interface is dynamic and changes according to the component selected.

4. Create Storage Pool

To create a primary storage pool:

After you login to the Data Virtualization Module module for the first time, the following window appears:

1. Select:
 - a. One or more disks, (in this example `/dev/nvme1n1`)

Create Primary Storage Pool ✕

Please select disk: **Total capacity: 50 GB**

Name	Capacity
<input checked="" type="checkbox"/> /dev/nvme1n1	50.0GB
<input type="checkbox"/> /dev/nvme2n1	50.0GB
<input type="checkbox"/> /dev/nvme3n1	1.0GB

Disk path:

Compression

or

- b. a disk path.

Create Primary Storage Pool ✕

Please select disk: **Total capacity: 50 GB**

Name	Capacity
<input checked="" type="checkbox"/> /dev/nvme1n1	50.0GB
<input type="checkbox"/> /dev/nvme2n1	50.0GB
<input type="checkbox"/> /dev/nvme3n1	1.0GB

Disk path:

Compression

2. Click **Create**.

 After the primary storage pool is created, the following message appears .

To create a secondary storage pool:

After the primary storage pool is created, the following window appears:

Confirmation request ✕

Do you want to proceed configuring secondary storage pool for Duplicates?

1. Click **Yes** to have a secondary storage pool contain duplicates.

2. Select:
 - a. One or more disks, (in this example `/dev/nvme2n1`)

Create Secondary Storage Pool (for Duplicates) ✕

Please select disk: Total capacity: 0 Bytes

Name	Capacity
<input checked="" type="checkbox"/> <code>/dev/nvme2n1</code>	50.0GB
<input type="checkbox"/> <code>/dev/nvme3n1</code>	1.0GB

Disk path:

Compression

or

- b. a disk path.

Create Secondary Storage Pool (for Duplicates) ✕

Please select disk: Total capacity: 0 Bytes

Name	Capacity
<input type="checkbox"/> <code>/dev/nvme2n1</code>	50.0GB
<input type="checkbox"/> <code>/dev/nvme3n1</code>	1.0GB

Disk path:

Compression

3. Click **Create**.



After the secondary storage pool is created, the following message appears

Pool 'secondary_pool' was created successfully

The **Storage Pool Management** window appears displaying the primary and secondary pools that have been added to the system.



5. Using an Oracle Data Base

The following sections from [Initial Setup](#) below to [Sharing Snapshots](#) are for Oracle users.

Return to [Getting to Know the GUI](#).

Continue to [Users Management](#).

5.1. ORACLE® Initial Setup

To setup the infrastructure in the Data Virtualization Module, do the following procedure:

1. [To install the Accelario source agent and target agent:](#)
2. [To add a source host:](#)
3. [To create a test data environment:](#)
4. [To add a target host:](#)
5. [To add a DB Home:](#)
6. [To create and start a VDB.](#)

To install the Accelario source agent and target agent:

Accelario agents are deployed on a source server and on a target server. There are two types of agents:

1. GI (golden image) agent - installed on the source server.
2. Destination agent - installed on the target server.

When the VDB is used on the same server where the source DB resides, both agents can be installed on the same server. It is necessary to change the ports as described below.



- > The agents should be run as root.
- > The agents should be run in the background.

Example for a source agent.

```
screen -dmS gi_agent java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar &
```

Example for a target agent.

```
screen -dmS dst_agent java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar &
```



The default port is 8080.

If necessary, the port can be changed. Use the following parameters to java execution:

Example for a source agent.

```
-Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092
```

Example for a target agent.

```
java -Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092 -jar ./dst_agent-1.0-SNAPSHOT.jar
```

To set the timezone for a java process:

To set the timezone for a java process, use the following code:

```
-Duser.timezone=<TimeZone> jvm command line option
```

Example for a source agent.

```
screen -dmS gi_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

Example for a target agent.

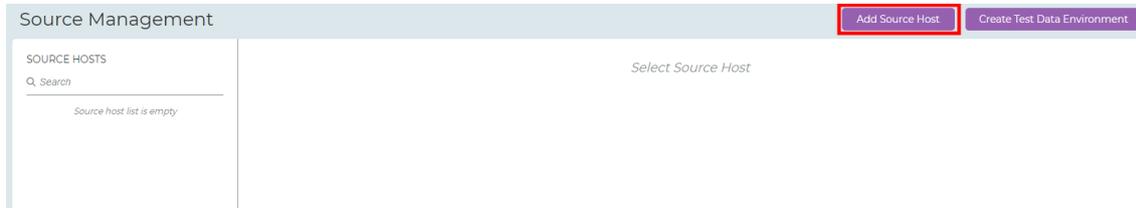
```
screen -dmS dst_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

To add a source host:

1. On the navigation bar, click  (Source).



The **Source Management** window appears.



2. Click **Add Source Host**.
3. Enter the source host details.



In all dialog boxes, an asterisk * next to a label on the left is used to identify a mandatory user input.

Add Source Host

* OS: Linux Windows

* Name

Description

* Host

* Port

+ Advanced Parameters

Add Cancel

4. Enter the **Advanced Parameters** if necessary.

Add Source Host ✕

* OS: Linux Windows

* Name:

Description:

* Host:

* Port:

- Advanced Parameters

Mount options:

5. Click **Add**.



After the source host is added, the following message appears



Source Host has been added

The **Source Management** window displays the source host(s) that have been added to the system.

Source Management

SOURCE HOSTS	Test Data Environments of gi-agent-1
<input type="text" value="Q Search"/>	<i>Test Data Environments list is empty</i>
gi-agent-1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
gi-agent-pg-u20 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
gi-agent-mssql <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

To create a test data environment:

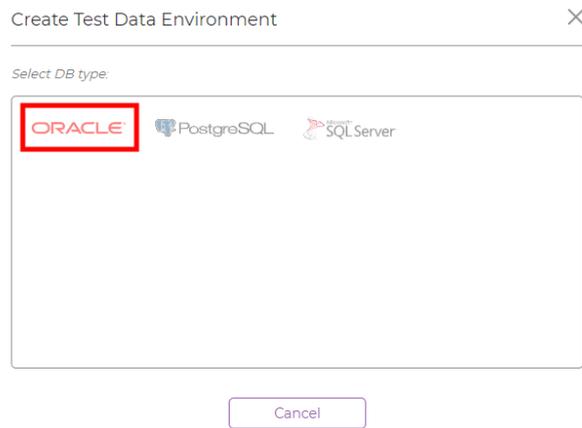
1. On the navigation bar, click  (Source).



The Source Management window appears.



2. Click **Create Test Data Environment**.
3. Select DB type.



4. Enter a **Name**.



5. Click **Next**.

To create a test data environment from a LIVE GI:

1. Enter the test data environment details.

Create Test Data Environment **ORACLE** ✕

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host: ▼

Force creation

Snapshot Policy

Activate Snapshots

Repeat every: ▼

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next**.

3. Enter the **Source DB Parameters**.

Create Test Data Environment **ORACLE** ✕

Source DB Parameters

* User:

* Password:

* VDB password:

* Port:

* Service:

* Version:

4. Click **Test Connection** to verify that the connection to the database is valid.

After the test is complete, the following message appears



A purple notification box with a white checkmark icon and the text "Test Data Environment connection is valid".

5. Click **Done**.

After the test data environment is created, the following message appears



A purple notification box with a white checkmark icon and the text "Test Data Environments has been created".

The **Source Management** window displays the test data environment for the source host that has been created.



The screenshot shows the "Source Management" interface. On the left, under "SOURCE HOSTS", there is a search bar and a list of hosts: "gi-agent-1", "gi-agent-pg-u20", and "gi-agent-mssql", each with three status icons. On the right, the "Test Data Environments of gi-agent-1" section is active, showing a card for "ORACLE" with a "Live DB" environment and "Live GI 12.2.0.1.0" details. At the top right of the window, there are buttons for "Add Source Host" and "Create Test Data Environment".

To create a test data environment from a RMAN GI:

1. Enter the test data environment details.

Create Test Data Environment **ORACLE** ✕

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host:

Force creation

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next**.

3. Enter the **Source DB Parameters**.

Create Test Data Environment **ORACLE** ✕

Source DB Parameters

* User:

* Password:

* VDB password:

* Port:

* Service:

* Version:

Parallel Processes No.:

* OS User:

* ORA Sid:

* ORA Home Dir:

Refresh Immediately

 It is recommended to select the **Refresh immediately** checkbox to make a full copy of the Golden Image after the test data environment is automatically created.

4. Click **Test Connection** to verify that the connection to the database is valid.

 After the test is complete, the following message appears 

5. Click **Done**.

 After the test data environment is created, the following message appears 

To create a test data environment from a RMAN STANDBY GI:

1. Enter the test data environment details.

Create Test Data Environment **ORACLE** ✕

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host:

Force creation

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next**.

3. Enter the **Source DB Parameters**.

Create Test Data Environment **ORACLE** ✕

Source DB Parameters

* User:

* Password:

* VDB password:

* SYS password:

* Port:

* Service:

* Version:

Parallel Processes No.:

* OS User:

* ORA Sid:

* ORA Home Dir:

Refresh Immediately



It is recommended to select the **Refresh immediately** checkbox to make a full copy of the Golden Image after the test data environment is automatically created.

4. Click **Test Connection** to verify that the connection to the database is valid.



After the test is complete, the following message appears

Test Data Environment connection is valid

5. Click **Done**.



After the test data environment is created, the following message appears

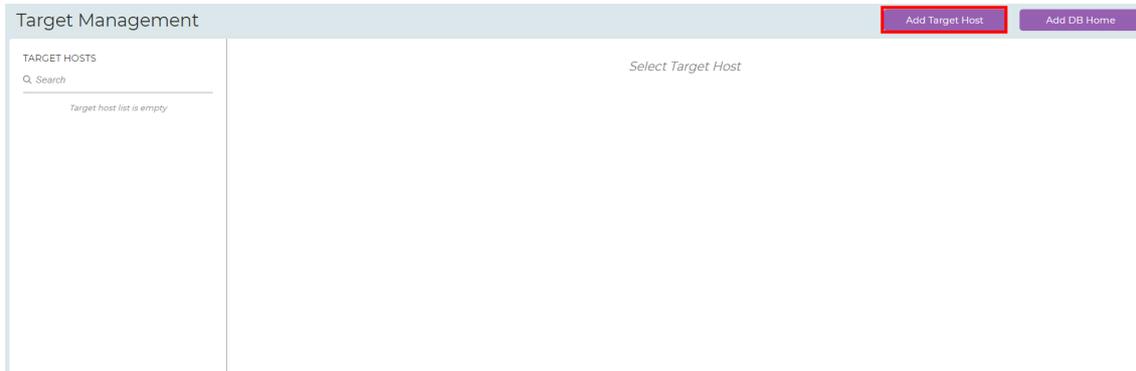
Test Data Environments has been created

To add a target host:

1. On the navigation bar, click  (Target).



The **Target Management** window appears.



2. Click **Add Target Host**.
3. Enter the target host details.

Add Target Host ✕

* OS: Linux Windows

* Name

Description

* Host

* Port

+ Advanced Parameters

4. Enter the **Advanced Parameters** if necessary.

Add Target Host✕

* OS: Linux Windows

* Name:

Description:

* Host:

* Port:

- Advanced Parameters

Mount options:

5. Click **Add**.

After the target host is added, the following message appears

✔ Target Host has been added

The **Target Management** displays the target host(s) that have been added to the system.

Target ManagementAdd Target HostAdd DB Home

TARGET HOSTS

Q Search

- dst-agent 🔍 🔄 🗑️
- dst-agent-pg-u20 🔍 🔄 🗑️
- dst-agent-mssql 🔍 🔄 🗑️

DB Homes of dst-agent-pg-u20

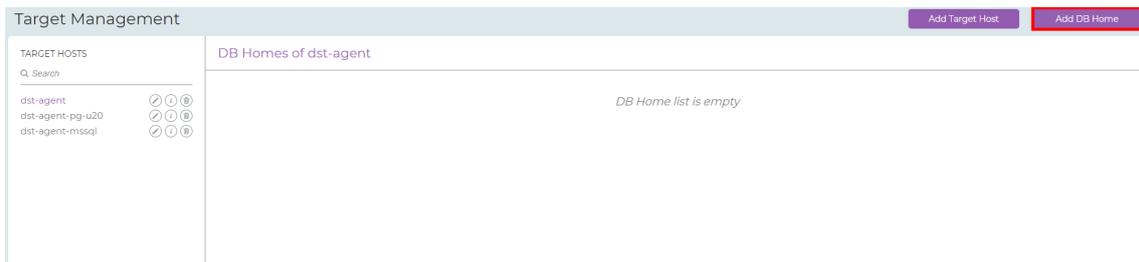
DB Home list is empty

To add a DB Home:

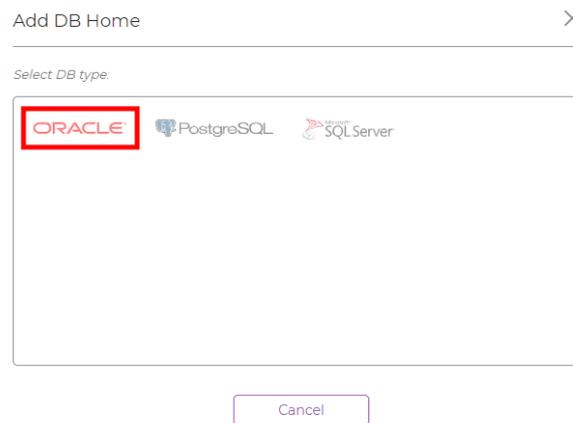


You add a **DB Home** in the **Target** work area.

1. Click **Add DB Home**.



2. Select a DB type.



3. Enter the DB Home details.

Add DB Home **ORACLE** ✕

* Name:

Description:

* Target Host:

Rac instance name:

* Oracle Home Dir:

* Database version:

* OS User:

* DB Port:

4. Click **Add**.



After the DB Home is added, the following message appears ✔ DB Home has been added

The **Target Management** displays the DB Home(s) that have been added to the system.

Target Management

TARGET HOSTS

Q Search

- dst-agent ✔ ○ ⊕
- dst-agent-pg-u20 ✔ ○ ⊕
- dst-agent-mssql ✔ ○ ⊕

DB Homes of dst-agent

ORACLE ✔ ○ ⊕

dst-home

122010

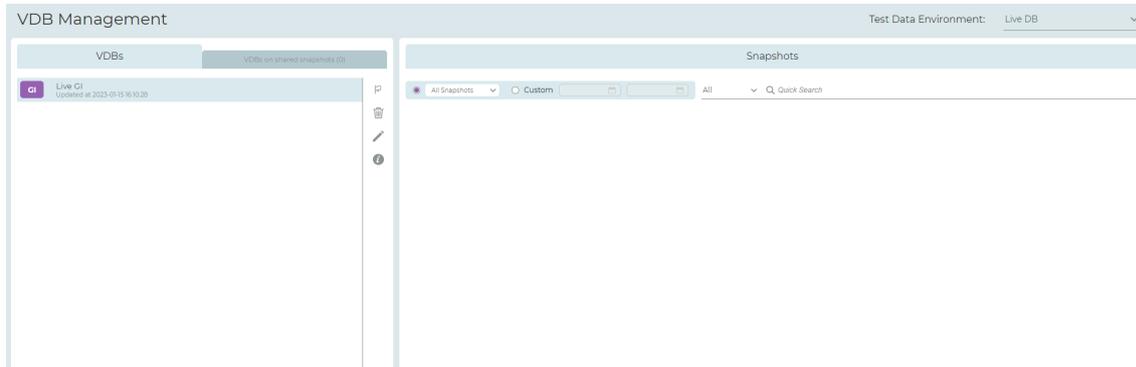
To create and start a VDB.

To create a VDB:

1. On the navigation bar, click  (VDB).

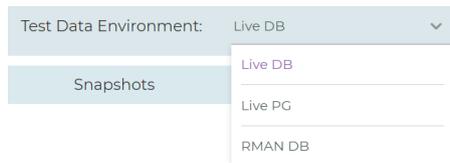


The **VDB Management** window appears.



To select a GI:

1. In the **VDB Management** window, select a Test Data Environment.

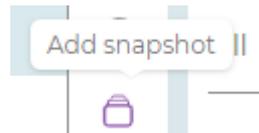


2. Select the GI.



Adding a snapshot:

1. Select the source.
2. Click  (Add snapshot).



3. Enter a **Name**.

Add Snapshot ✕

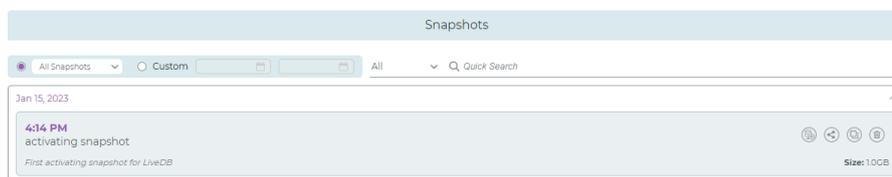
* Name

Description

4. Click **Add**.

 After the snapshot is created, the following message appears ✔ Snapshot has been created.

The **Snapshots** work area displays the new snapshot with all the snapshots that have been created.



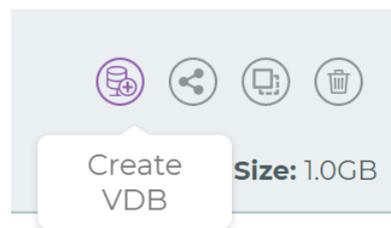


It is possible to scroll using the time and date to the right of a search screenshot.

To create a VDB from a snapshot:

1. Select a snapshot.

2. Click  **Create VDB**.



3. Enter the VDB parameters.

Create VDB **ORACLE** ✕

* Name

Description

Start Immediately

* Target DB Home

Ora SID

* Parallel Processes

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

+ Advanced Parameters



It is recommended to select the **Start Immediately** checkbox.

4. Enter the **Advanced Parameters**, if necessary.

- Advanced Parameters

Oracle parameters:

db_recovery_file_dest	<input type="text"/>	db_recovery_file_dest_size	<input type="text"/>
local_listener	<input type="text"/>	memory_max_target	<input type="text"/>
memory_target	<input type="text"/>	pga_aggregate_limit	<input type="text"/>
pga_aggregate_target	<input type="text"/>	sga_max_size	<input type="text"/>
sga_target	<input type="text"/>		

Pre/Post Scripts:

Pre OS script path:

Post OS script path:

Post SQL script path:

Rename datafile:

From:

To:



For more information about **Advanced Parameters**, see [To add an advanced parameter:](#)

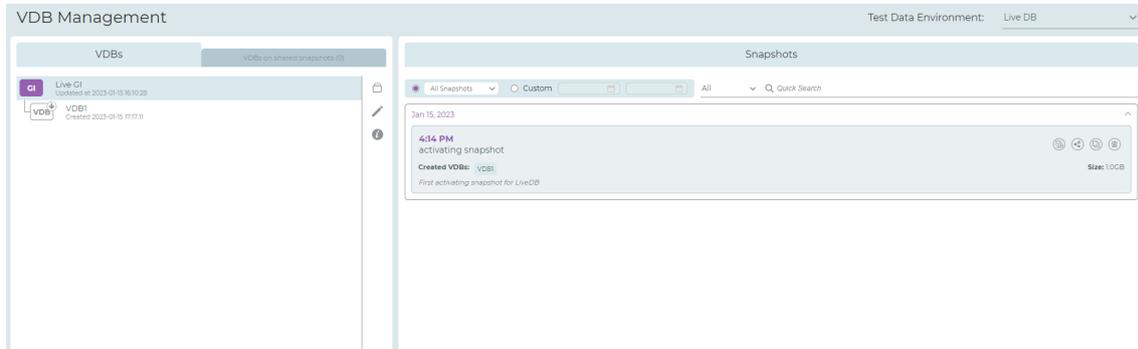
5. Click **Create**. Otherwise, click **Cancel** to exit without creating a VDB.



After the VDB is created, the following message appears

The Volume has been created

The **VDB Management** window displays the VDB that has been created.



The following icons display information about a VDB:

Icon	Description
	VDB Locked
	VDB Stopped
	VDB Started
	VDB Creation Failed

5.2. Source Management

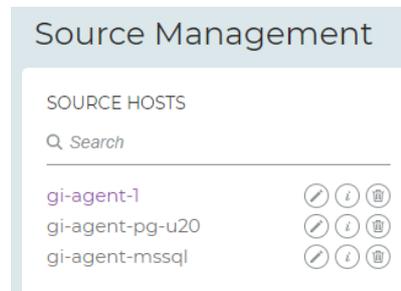
A source host is a server that hosts the source databases. A test data environment includes access definition to one source database and a GI. This section describes how to create and manage a **Source Host** and a **Test Data Environment**.

To open the Source work area:

1. On the navigation bar, click  (Source).



The **Source Hosts** window appears displaying all the source hosts that have been added to the system.



You can quickly locate a source host by typing its letters on the **Search** bar. The list updates promptly.

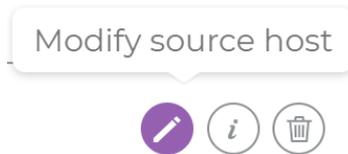
Q Search



To add a source host, see [To add a source host](#):

To modify a source host:

1. Select the source host.
2. Click  (Modify source host).



3. Modify the source host as required.

Modify Source Host ✕

* OS: Linux Windows

* Name

Description

* Host

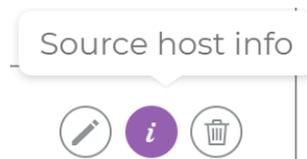
* Port

+ Advanced Parameters

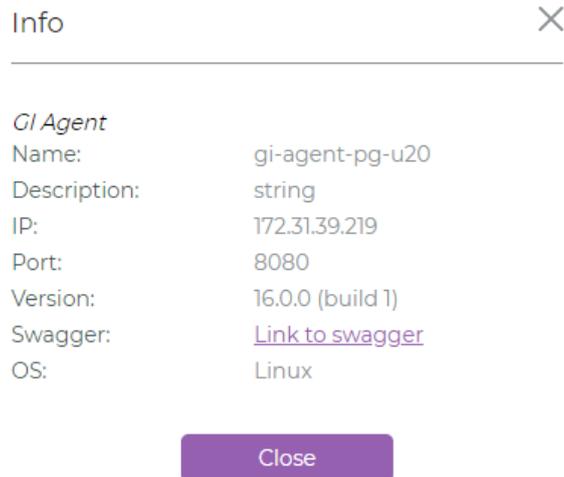
4. To save your changes, click **Modify**.

To see source host information:

1. Select the source host.
2. Click  (Source host info).



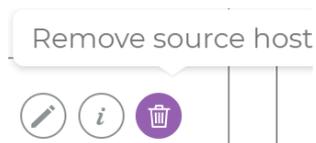
The **Info** window appears.



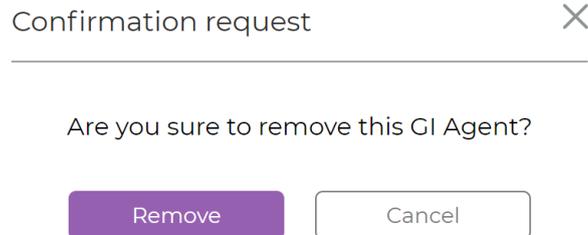
3. To return to the main **Source Management** work area, click **Close**.

To remove a source host:

1. Select the source host.
2. Click  (**Remove source host**).

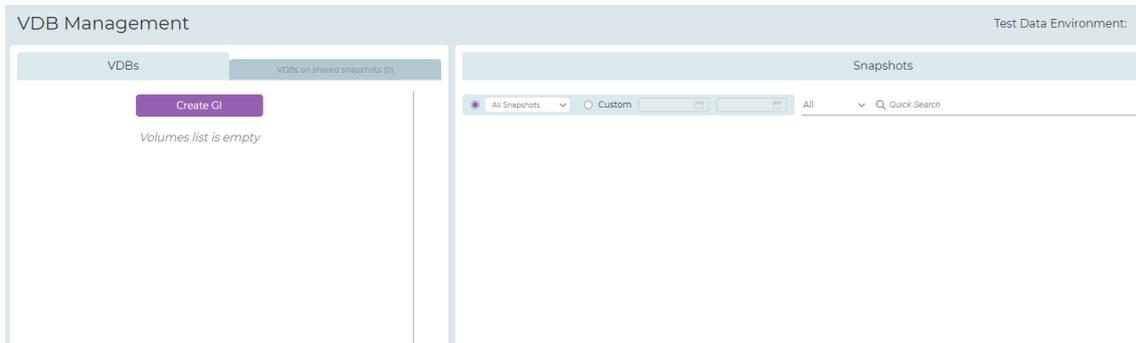


3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the source host.

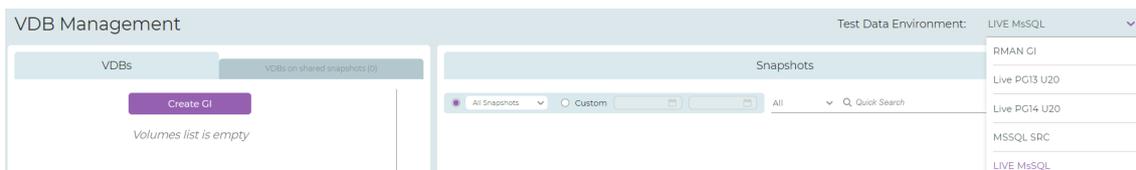


The create a test data environment form the VDB Management window:

1. Open the **VDB Management** window.



2. In the **VDB Management** window, select a **Test Data Environment**.



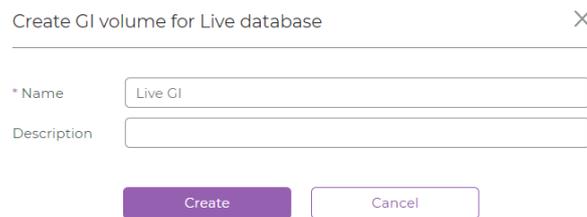
Live GI

To create a Live GI:

1. Click **Create LIVE GI**.



2. Enter a **Name**.

A screenshot of a dialog box titled 'Create GI volume for Live database' with a close button (X) in the top right corner. The dialog contains two input fields: '* Name' with the value 'Live GI' and 'Description' which is empty. At the bottom, there are two buttons: 'Create' (purple) and 'Cancel' (light purple).

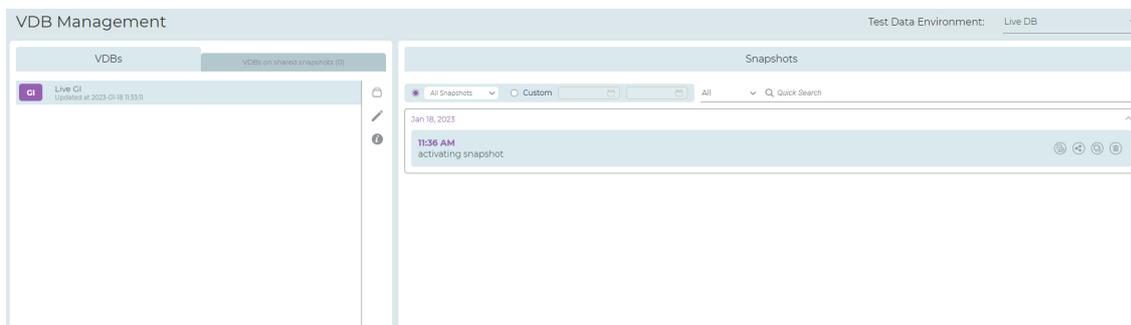
3. Click **Create**.



After the GI is created, the following message appears

✔ Golden Image (live) has been created

The **VDB Management** window displays the GI that was created.



RMAN GI

To create a RMAN GI:

1. Click **Create RMAN GI**.



2. Enter a **Name**.

Create GI volume for RMAN database ✕

* Name

Description

3. Click **Create**.

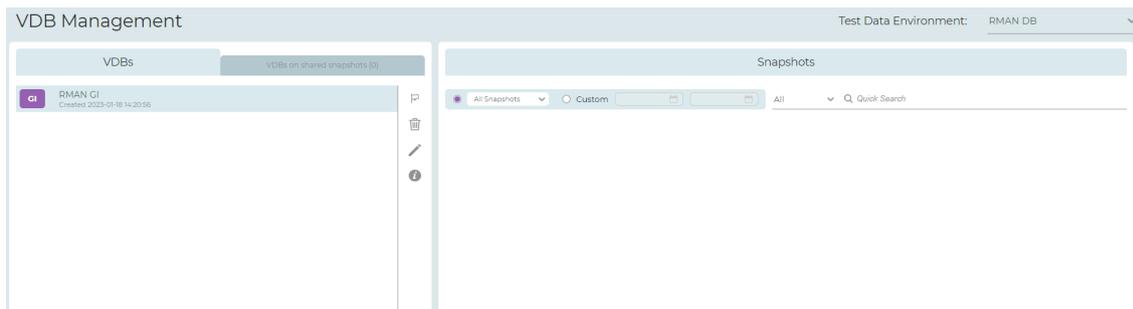
 During the creation of the RMAN GI, the following message appears

 Create RMAN GI database is in progress

 After the GI is created, the following message appears

 RMAN GI has been created

The **VDB Management** window displays the RMAN GI that was created.



To create a test data environment:



To create a test data environment, see [To create a test data environment](#).

To edit a test data environment:

1. Select the test data environment.
2. Click  (Modify Test Data environment).



2. The **Modify Test Data Environment** window appears. Modify the test data environment name if necessary.

Modify Test Data Environment  ✕

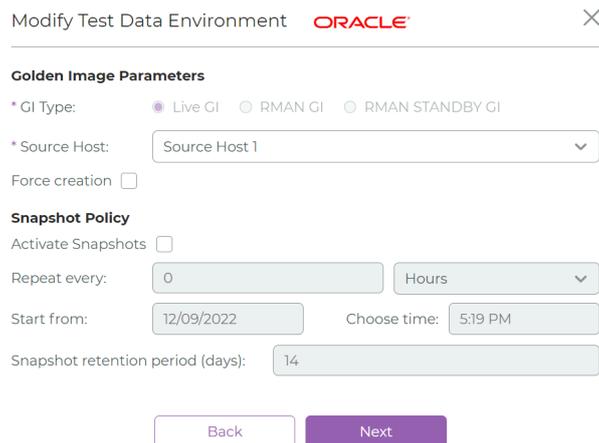
* Name:

Description:

3. Click **Next** to go to the next **Modify Test Data Environment** window.

To modify a Live GI:

1. Modify the **Golden Image Parameters** as required.



Modify Test Data Environment ORACLE

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host: Source Host 1

Force creation

Snapshot Policy

Activate Snapshots

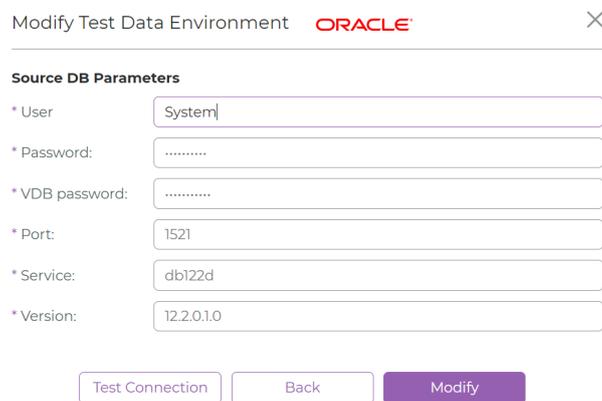
Repeat every: 0 Hours

Start from: 12/09/2022 Choose time: 5:19 PM

Snapshot retention period (days): 14

Back Next

2. Click **Next** to go to the next **Modify Test Data Environment** window.
3. Modify the **Source DB Parameters** as required.



Modify Test Data Environment ORACLE

Source DB Parameters

* User: System

* Password:

* VDB password:

* Port: 1521

* Service: db122d

* Version: 12.2.0.1.0

Test Connection Back Modify

4. To save your changes, click **Modify**.

To modify a RMAN GI:

1. Modify the **Golden Image Parameters** as required.

Modify Test Data Environment ORACLE X

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host:

Force creation

Snapshot Policy

Activate Snapshots

Repeat every: Days

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next** to go to the next **Modify Test Data Environment** window.
3. Modify the **Source DB Parameters** as required.

Modify Test Data Environment ORACLE X

Source DB Parameters

* User:

* Password:

* VDB password:

* Port:

* Service:

* Version:

Parallel Processes No.:

* OS User:

* ORA Sid:

* ORA Home Dir:

4. To save your changes, click **Modify**.

To modify a RMAN STANDBY GI:

1. Modify the **Golden Image Parameters** as required.

Modify Test Data Environment **ORACLE** ✕

Golden Image Parameters

* GI Type: Live GI RMAN GI RMAN STANDBY GI

* Source Host:

Force creation

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next** to go to the next **Modify Test Data Environment** window.

3. Modify the **Source DB Parameters** as required.

Modify Test Data Environment **ORACLE** ✕

Source DB Parameters

* User:

* Password:

* VDB password:

* SYS password:

* Port:

* Service:

* Version:

Parallel Processes No.:

* OS User:

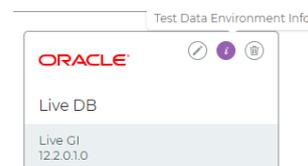
* ORA Sid:

* ORA Home Dir:

4. To save your changes, click **Modify**.

To see information about a test data environment:

1. Select the test data environment.
2. Click  (Test Data Environment Info).



The **Info** window appears.

Info ✕

Source Database

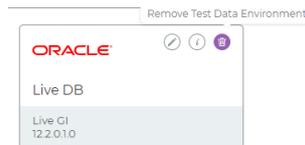
IP-Address:	172.31.37.112
Name:	TDM env 1
Description:	
Port:	1521
Service:	db122d
User:	System
Password:	*****
VDB Password:	*****
Version:	12.2.0.1.0
Type:	GL_LIVE
GI Name:	Source Host 1

[Close](#)

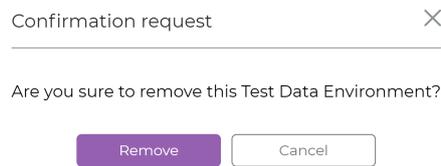
3. To return to the main **Source Management** work area, click **Close**.

To remove a test data environment:

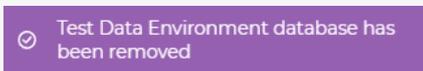
1. Select the test data environment.
2. Click  (Remove Test Data Environment).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the test data environment.



After the database is removed, the following message appears



5.3. Target Management

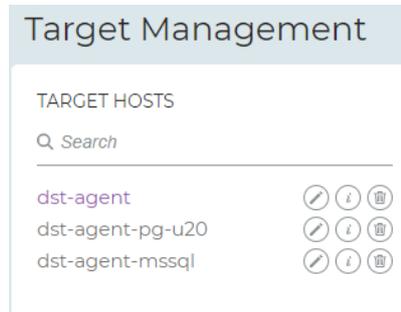
A test data environment includes access definition to one source database and a GI. A DB Home is the target database that is used to make VDBs.

To open the Target work area:

- 1. On the navigation bar, click  (Target).



The **Target Management** window appears displaying all the target hosts that have been added to the system.



You can quickly locate a target host by typing its letters on the **Search** bar. The list updates promptly.



Q Search

To add a target host:



To add a target host, see [To add a target host.](#)

To modify a target host:

1. Select the target host.
2. Click  Modify target host.

Modify target host



3. Modify the parameters as required.

Modify Target Host ✕

* OS: Linux Windows

* Name

Description

* Host

* Port

+ Advanced Parameters

4. To save your changes, click **Modify**.

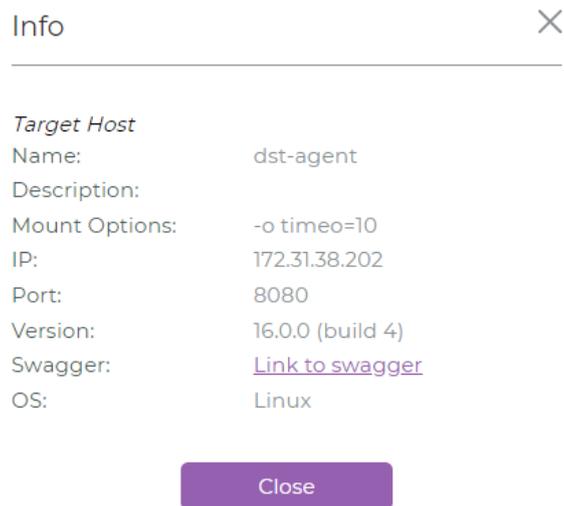
To see target host information:

1. Select the target host.
2. Click  (Target host info).

Target host info



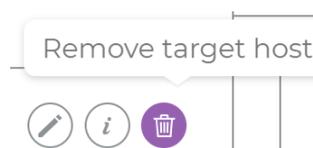
The **Info** window appears.



3. To return to the main **Target Management** work area, click **Close**.

To remove a target host:

1. Select the target host.
2. Click  (Remove target host).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the target host.

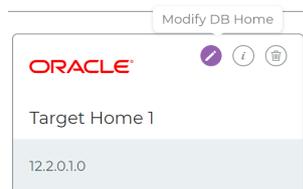


To add a DB Home:



To edit DB Homes:

1. Select the DB Home.
2. Click  (Modify DB Home).



3. The **Modify DB Home** window appears. Modify the test data environment details as required.

Modify DB Home ORACLE

* Name: Target Home 1

Description:

* Target Host: Target Host 1

Rac instance name:

* Oracle Home Dir: /home/oracle/product/12.2/db_1

* Database version: 12.2.0.1.0

* OS User: Oracle

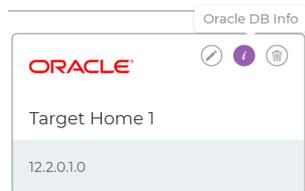
* DB Port: 1521

Modify

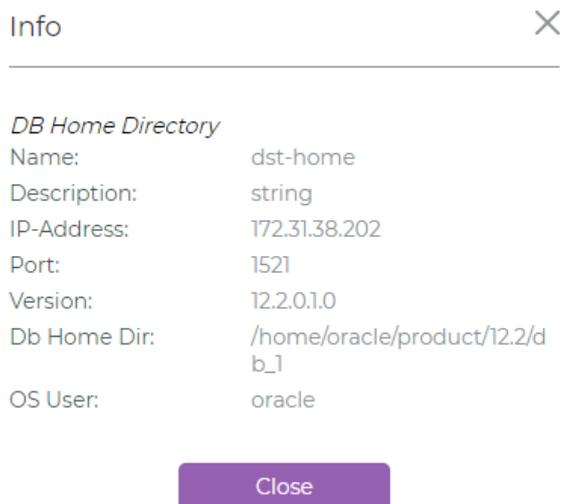
4. To save your changes, click **Modify**.

To see information about a DB Home:

1. Select the DB Home.
2. Click  (DB Home info).



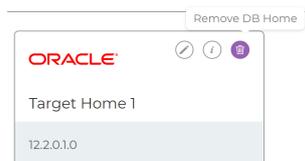
The **Info** window appears.



3. To return to the main **Target Management** work area, click **Close**.

To remove a DB Home:

1. Select the DB Home.
2. Click  (Remove DB Home).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the DB Home.

Confirmation request ✕

Are you sure to remove this DB Home?

Remove

Cancel



After the DB Home is removed, the following message appears

✔ DB Home has been removed

5.4. VDB Management

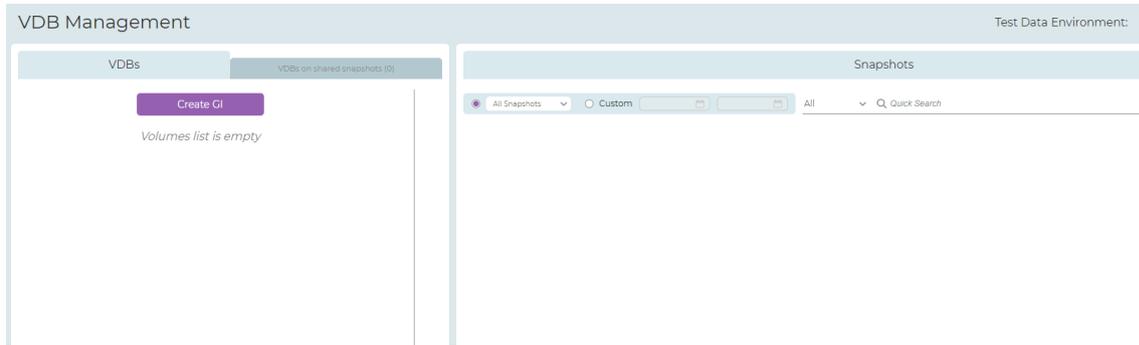
In the **VDB** work area, you do tasks for a golden image, a duplicate golden image, a VDB, and database snapshots. A golden image is a full synchronized copy of the source database files. A golden image is used to create VDBs. A snapshot is a read/write point-in-time copy of the golden image. This section describes how to do these tasks.

To open the VDB work area:

1. On the navigation bar, click  (VDB).



The **VDB Management** window appears.



To create VDB:



To create a VDB, see [To create and start a VDB](#).

To activate a GI:

1. Select the GI in the list.
2. Click  (Activate volume).



To remove a GI:

1. Select a GI in the list.
2. Click  (Remove Golden Image).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the volume.

Confirmation request ✕

Are you sure you want to remove this Golden Image?



After the GI is removed, the following message appears

✔ Golden Image (live) has been deleted

To edit a GI:

1. Select the GI in the list.
2. Click  (Modify volume).



3. Enter a new **Name**.

Modify Test Data Environment **ORACLE** ✕

* Name:

Description:

Next

4. To save your changes, click **Modify**. Otherwise, click **Cancel**.

 After the change is done, the following message appears  Volume has been updated

To see information about a GI:

1. Select the GI in the list.
2. Click  (**Volume info**).



The **Info** window appears.

Info ✕

Volume Info

Name	Native Backup GI
Created At	2023-02-07 07:25:13.568
Storage Path	\main_pool\00000043

Log History **Last Logs** **Cancel**

- To see the last logs, click **Last Logs** or click **Cancel** to return to the VDB Management window.

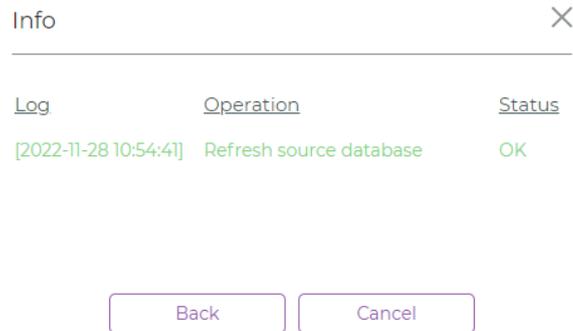
Info ✕

```
[2023-02-07 13:35:18.806] [INFO]    GI Agent artifactVersion=16.0.0, buildNumber=1
[2023-02-07 13:35:18.806] [INFO]    Start MSSQL auto sync procedure.
[2023-02-07 13:35:25.472] [INFO]    MSSQL auto sync scripts executed successfully.
Script output: VERBOSE: M Drive successfully mounted
VERBOSE: Starting to restore Transaction Log Backup with name:
AdventureWorks2016_DEV_TRN_07022023_1335.trn
VERBOSE: 100 percent processed.
VERBOSE: Processed 0 pages for database 'AdventureWorks2016_DEV', file
'AdventureWorks2016_Data' on file 1.
VERBOSE: Processed 4 pages for database 'AdventureWorks2016_DEV', file
'AdventureWorks2016_Log' on file 1.
VERBOSE: RESTORE LOG successfully processed 4 pages in 0.011 seconds (2.840 MB/sec).
VERBOSE: AdventureWorks2016_DEV_TRN_07022023_1335.trn Log backup successfully restored
VERBOSE: M Drive successfully unmounted
```

BackDownloadCloseAuto-refresh

- Click **Auto-refresh** to do an auto refresh.
- To download the last logs, click **Download** or click **Close** to return to the VDB Management window.

6. To see the log history, click **Log History** or click **Cancel** to return to the **VDB Management** window.



The image shows a window titled "Info" with a close button (X) in the top right corner. Below the title bar is a table with three columns: "Log", "Operation", and "Status". The table contains one row of data. Below the table are two buttons: "Back" and "Cancel".

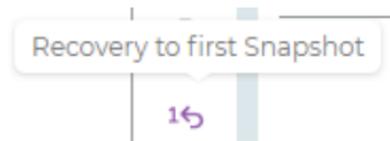
<u>Log</u>	<u>Operation</u>	<u>Status</u>
[2022-11-28 10:54:41]	Refresh source database	OK

Back Cancel

7. Click **Back** or **Cancel** to return to the **Info** window.

To recover to the first snapshot:

1. Select the source DB.
2. Click  (Recovery to first snapshot).



3. Click **Recovery** to confirm the recovery or **Cancel** to exit with recovering the snapshot.



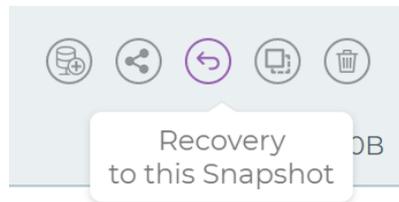


After all the snapshots are removed, the following message appears

✔ Volume has been recovered to the first snapshot

To recover to this snapshot:

1. Select the snapshot.
2. Click  (Recovery to this snapshot).



3. Click **Recover** to confirm the recovery or **Cancel** to exit with recovering the snapshot.

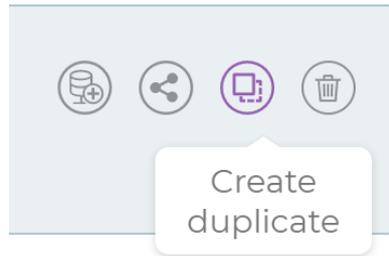


After the recover operation is complete, the following message appears

✔ Volume has been recovered

To create a duplicate VDB from a snapshot:

1. Select the snapshot.
2. Click  Create duplicate.



3. Enter a **Name**.

Create duplicate ×

* Name

Description

4. Click **Create**. Otherwise, click **Cancel** to exit without creating a duplicate VDB.



During the creation of the duplicate GI, the following message appears

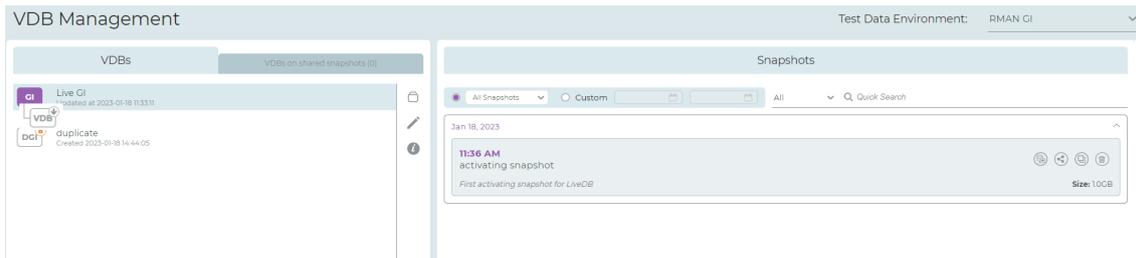
✔ Duplicate creation is in progress



After the duplicate GI is created, the following message appears

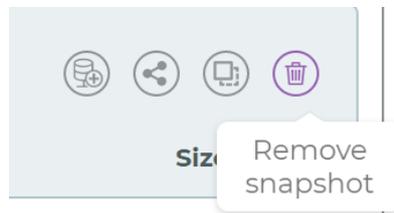
✔ Duplicate has been created

The **VDB Management** window displays the duplicate GI that has been created.



To remove a snapshot:

1. Select the snapshot.
2. Click  (Remove snapshot).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the snapshot.

Confirmation request ✕

Are you sure to remove this snapshot?

Remove

Cancel



After the snapshot is removed, the following message appears

✔ Snapshot has been deleted

VDB

This section describes additional tasks that are available to manage VDBs.

To start a VDB:

1. Select the VDB.
2. Click  (Start VDB).



3. Enter the VDB configuration parameters.

Start VDB **ORACLE** ✕

* Name

Description

* Target DB Home ▼

* Ora SID

* Parallel Processes

+ Advanced Parameters

4. Enter Advanced Parameters if necessary.

- Advanced Parameters

Oracle parameters:

sga_target	<input type="text"/>	pga_aggregate_target	<input type="text"/>
memory_target	<input type="text"/>	db_recovery_file_dest_size	<input type="text"/>
local_listener	<input type="text"/>		

Pre/Post Scripts:

Pre OS script path:

Post OS script path:

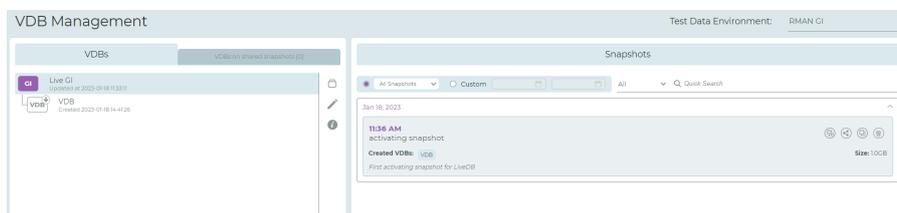
Post SQL script path:

Rename datafile:

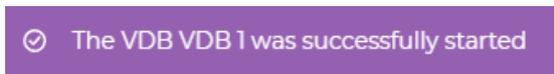
From:

To:

5. Click **Start VDB**. Otherwise, click **Cancel** to exit.

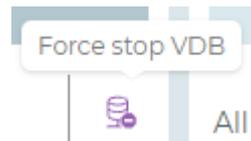


After the VDB was started, the following message appears



To force stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Force stop VDB).



During the force stop, the following message appears



VDB stop is in progress



After the force stop is complete, the following message appears



VDB has been stopped

To stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Stop VDB).



During the stop, the following message appears



VDB stop is in progress



After the stop is complete, the following message appears



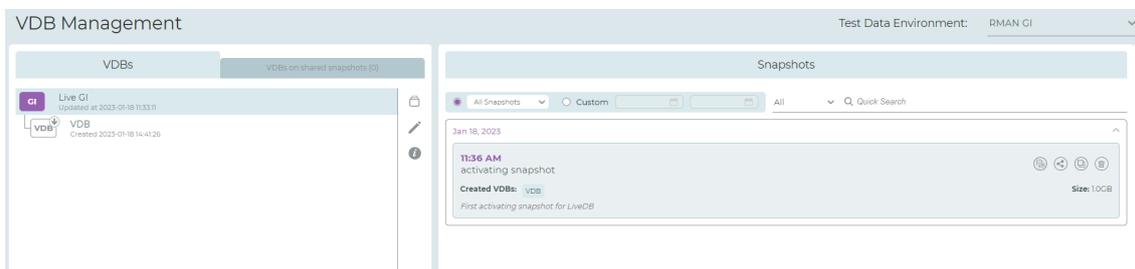
VDB has been stopped

5.5. Sharing Snapshots

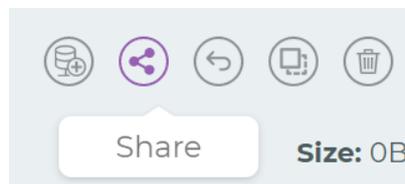
A user in one role category can share a snapshot with a user in another role category. This section gives the procedure. In the following example a user with a QA role shares a snapshot with a Dev role.

To share a VDB:

1. Select a snapshot of a Golden Image or a VDB.



2. Click  **Share** on a snapshot object.



3. Select the role to share the snapshot.

Share/Unshare Snapshot ✕

* Select Roles:

Dev

4. Click **Submit**.

 After the snapshot is shared, the following message appears ✔ Snapshot has been shared

The **VDB Management** window displays the relevant sharing information.

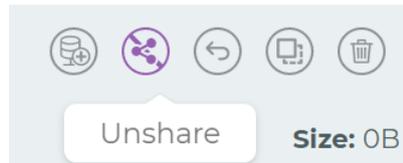
12:04 PM
Snapshot_00001691 🔍 🔄 ⏪ ⏩ 🗑️ **Size:** 0B

Shared to QA by admin Jan 16, 2023, 14:10 PM

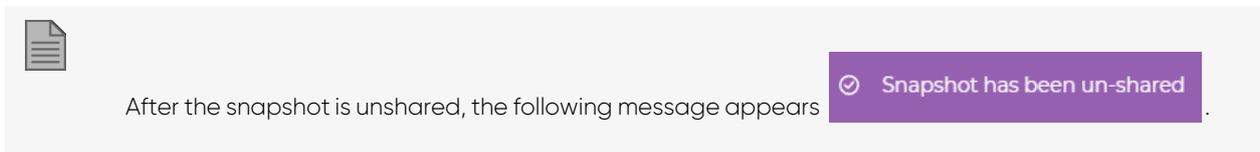
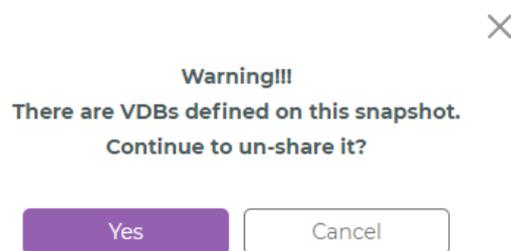
To unshare a snapshot:

1. Select the snapshot.

2. Click  **Unshare**.

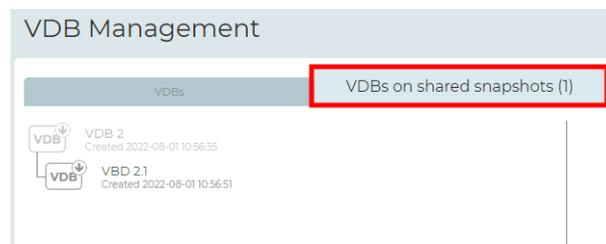


3. Click **Yes** to confirm unsharing the snapshot or **Cancel** to exit with unsharing the snapshot.



To see snapshots that are shared to you:

1. Click **VDBs on shared snapshots**.



6. Using a PostgreSQL Data Base

The following sections from [Initial Setup](#) below to [Sharing Snapshots](#) are for PostgreSQL users.

Return to [Getting to Know the GUI](#).

Continue to [Users Management](#).

6.1. PostgreSQL Initial Setup

To setup the infrastructure in the Data Virtualization Module, do the following procedure:

1. [To install the Accelario source agent and target agent:](#)
2. [To add a source host](#)
3. [To create a test data environment:](#)
4. [To add a target host:](#)
5. [To add a DB Home:](#)
6. [To create and start a VDB.](#)

To install the Accelario source agent and target agent:

Accelario agents are deployed on a source server and on a target server. There are two types of agents:

1. GI (golden image) agent - installed on the source server.
2. Destination agent - installed on the target server.

When the VDB is used on the same server where the source DB resides, both agents can be installed on the same server. It is necessary to change the ports as described below.



- > The agents should be run as root.
- > The agents should be run in the background.

Example for a source agent.

```
screen -dmS gi_agent java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar &
```

Example for a target agent.

```
screen -dmS dst_agent java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar &
```



The default port is 8080.

If necessary, the port can be changed. Use the following parameters to java execution:

Example for a source agent.

```
-Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092
```

Example for a target agent.

```
java -Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092 -jar ./dst_agent-1.0-SNAPSHOT.jar
```

To set the timezone for a java process:

To set the timezone for a java process, use the following code:

```
-Duser.timezone=<TimeZone> jvm command line option
```

Example for a source agent.

```
screen -dmS gi_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

Example for a target agent.

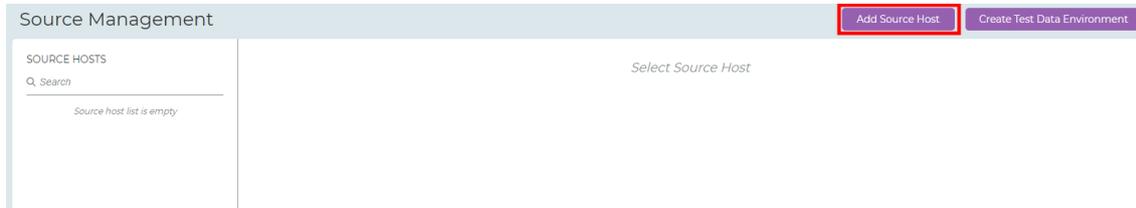
```
screen -dmS dst_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

To add a source host

1. On the navigation bar, click  (Source).



The **Source Management** window appears.



2. Click **Add Source Host**.
3. Enter the source host details.



In all dialog boxes, an asterisk * next to a label on the left is used to identify a mandatory user input.

4. Enter the **Advanced Parameters** if necessary.

Add Source Host ✕

* OS: Linux Windows

* Name

Description

* Host

* Port

- Advanced Parameters

Mount options:

5. Click **Add**.

 After the source host is added, the following message appears Source Host has been added

The **Source Management** window displays the source host(s) that have been added to the system.

Source Management Add Source Host Create Test Data Environment

SOURCE HOSTS

Q Search

gi-agent-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gi-agent-pg-u20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gi-agent-mssql	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test Data Environments of gi-agent-pg-u20

Test Data Environments list is empty

To create a test data environment:

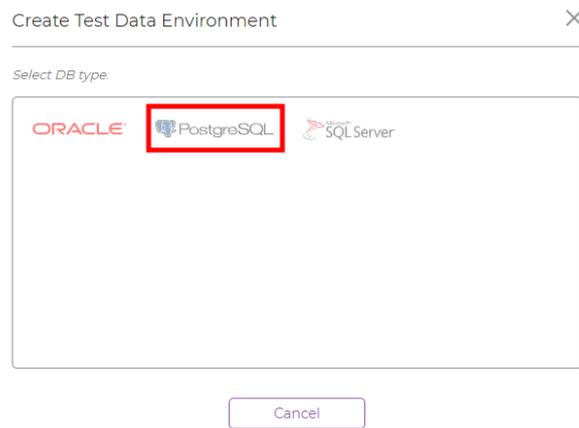
1. On the navigation bar, click  (Source).



The Source Management window appears.



2. Click **Create Test Data Environment**.
3. Select DB type.



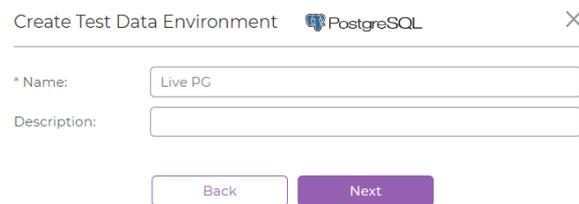
Create Test Data Environment ✕

Select DB type:

ORACLE PostgreSQL Microsoft SQL Server

Cancel

4. Enter a **Name**.



Create Test Data Environment PostgreSQL ✕

* Name: Live PG

Description:

Back Next

5. Click **Next**.

To create a test data environment from a LIVE GI:

1. Enter the test data environment details.

Create Test Data Environment PostgreSQL ✕

Golden Image Parameters

* GI Type: Live GI

* Source Host:

Force creation

Snapshot Policy

Activate Snapshots

Repeat every: Hours

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next**.

3. Enter the **Source DB Parameters**.

Create Test Data Environment PostgreSQL ✕

Source DB Parameters

* User:

* Password:

* VDB password:

* Port:

* Cluster Name:

* OS User:

* PostgreSQL Home Dir:

* Version:

4. Click **Test Connection** to verify that the connection to the database is valid.

After the test is complete, the following message appears



5. Click **Done**.

After the test data environment is created, the following message appears



The **Source Management** window displays the test data environment for the source host that has been created.

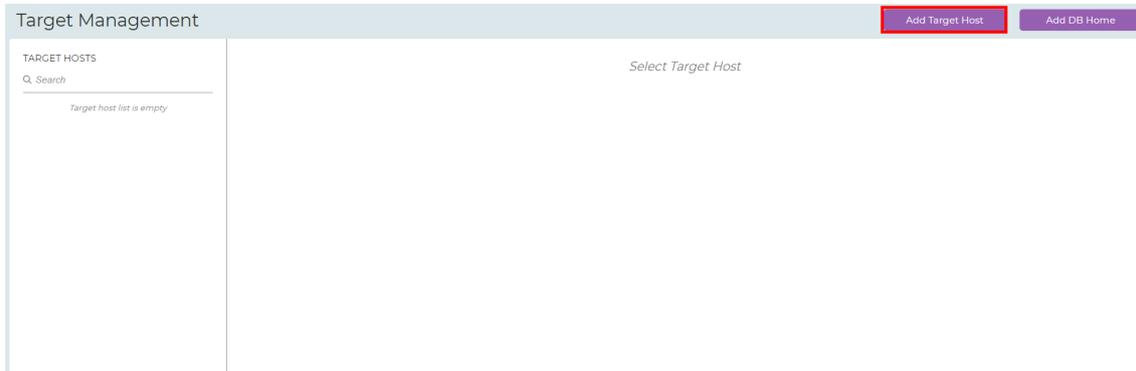


To add a target host:

1. On the navigation bar, click  (Target).



The **Target Management** window appears.



2. Click **Add Target Host**.
3. Enter the target host details.

Add Target Host ✕

* OS: Linux Windows

* Name

Description

* Host

* Port

+ Advanced Parameters

4. Enter the **Advanced Parameters** if necessary.

Add Target Host ✕

* OS: Linux Windows

* Name:

Description:

* Host:

* Port:

- Advanced Parameters

Mount options:

5. Click **Add**.

 After the target host is added, the following message appears ✔ Target Host has been added

The **Target Management** displays the target host(s) that have been added to the system.

Target Management

TARGET HOSTS	DB Homes of dst-agent-pg-u20
<input type="text" value="Q Search"/> dst-agent <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> dst-agent-pg-u20 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> dst-agent-mssql <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<i>DB Home list is empty</i>

To add a DB Home:

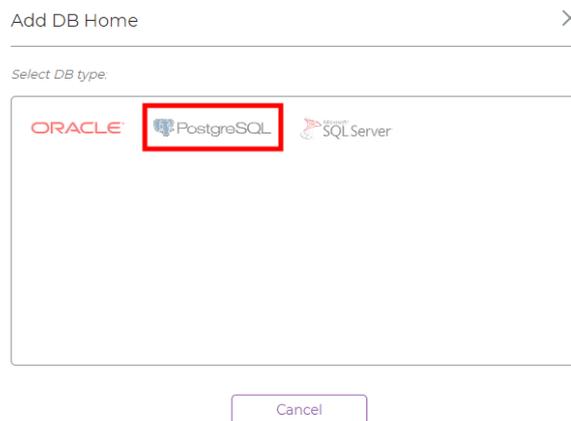


You add a **DB Home** in the **Target** work area.

1. Click **Add DB Home**.



2. Select a DB type.



3. Enter the DB Home details.

Add DB Home  ✕

* Name:

Description:

* Target Host:

* PostgreSQL Home Dir:

* Database version:

* OS User:

4. Click **Add**.



The **Target Management** displays the DB Home(s) that have been added to the system.

Target Management

TARGET HOSTS

Q Search

- dst-agent 🔍 ⌵ ⌶
- dst-agent-pg-u20 🔍 ⌵ ⌶
- dst-agent-mssql 🔍 ⌵ ⌶

DB Homes of dst-agent-pg-u20

 PostgreSQL 🔍 ⌵ ⌶

PG13 U20 Home

13.8

 PostgreSQL 🔍 ⌵ ⌶

PG14 U20 Home

14.4

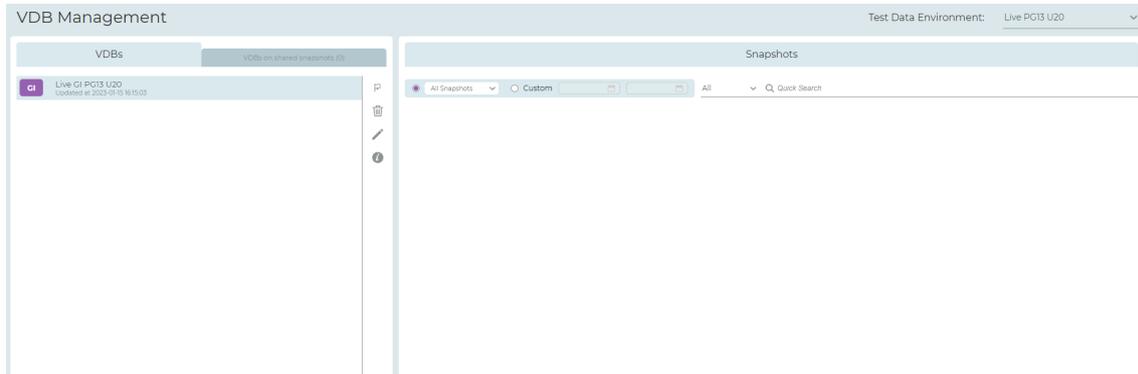
To create and start a VDB.

To create a VDB:

1. On the navigation bar, click  (VDB).

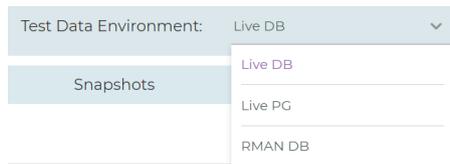


The **VDB Management** window appears.

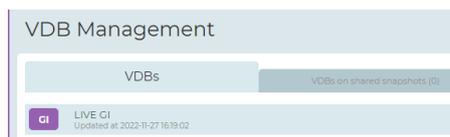


To select a GI:

1. In the **VDB Management** window, select a Test Data Environment.

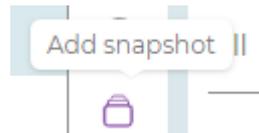


2. Select the GI.



Adding a snapshot:

1. Select the source.
2. Click  (Add snapshot).



3. Enter a **Name**.

Add Snapshot ✕

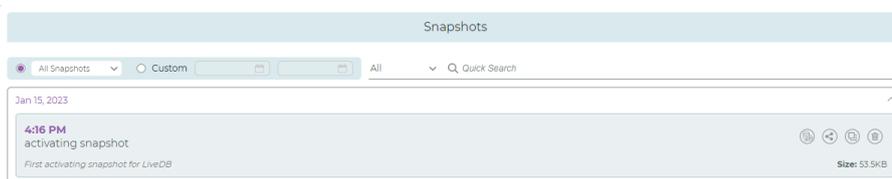
* Name

Description

4. Click **Add**.

 After the snapshot is created, the following message appears ✔ Snapshot has been created.

The **Snapshots** work area displays the new snapshot with all the snapshots that have been created.



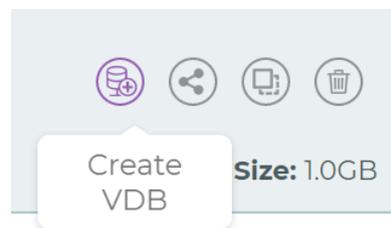


It is possible to scroll using the time and date to the right of a search screenshot.

To create a VDB from a snapshot:

1. Select a snapshot.

2. Click  **Create VDB**.



3. Enter the VDB parameters.

Create VDB PostgreSQL X

* Name

Description

Start Immediately

* Target DB Home

* Cluster Name

* DB Port

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

+ Advanced Parameters



It is recommended to select the **Start Immediately** checkbox.

4. Enter the **Advanced Parameters**, if necessary.

- Advanced Parameters

Pre/Post Scripts:

Pre OS script path:

Post OS script path:

Post SQL script path:



For more information about **Advanced Parameters**, see [To add an advanced parameter:](#)

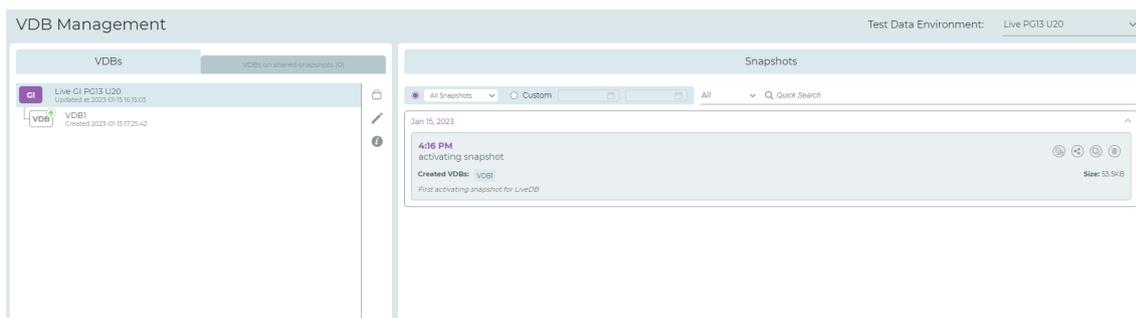
5. Click **Create VDB**. Otherwise, click **Cancel** to exit without creating a VDB.



After the VDB is created, the following message appears

The Volume has been created

The **VDB Management** window displays the VDB that has been created.



The following icons display information about a VDB:

Icon	Description
	VDB Locked
	VDB Stopped
	VDB Started
	VDB Creation Failed

6.2. Source Management

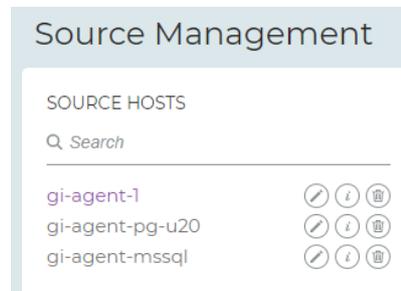
A source host is a server that hosts the source databases. A test data environment includes access definition to one source database and a GI. This section describes how to create and manage a **Source Host** and a **Test Data Environment**.

To open the Source work area:

1. On the navigation bar, click  (Source).



The **Source Hosts** window appears displaying all the source hosts that have been added to the system.



You can quickly locate a source host by typing its letters on the **Search** bar. The list updates promptly.



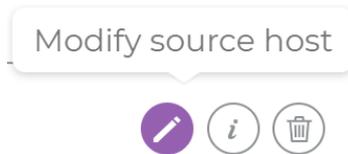
Q Search



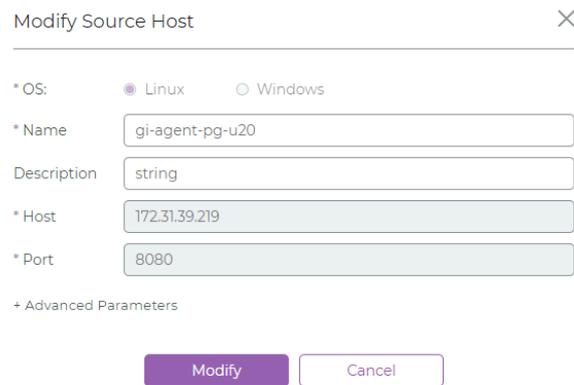
To add a source host, see [To add a source host](#)

To modify a source host:

1. Select the source host.
2. Click  (Modify source host).



3. Modify the source host as required.



A screenshot of a dialog box titled "Modify Source Host" with a close button (X) in the top right corner. The dialog contains the following fields and options:

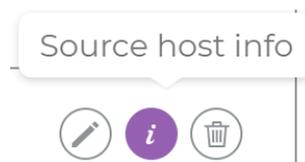
- * OS: Linux Windows
- * Name:
- Description:
- * Host:
- * Port:
- + Advanced Parameters

At the bottom of the dialog are two buttons: "Modify" (purple) and "Cancel" (white with purple border).

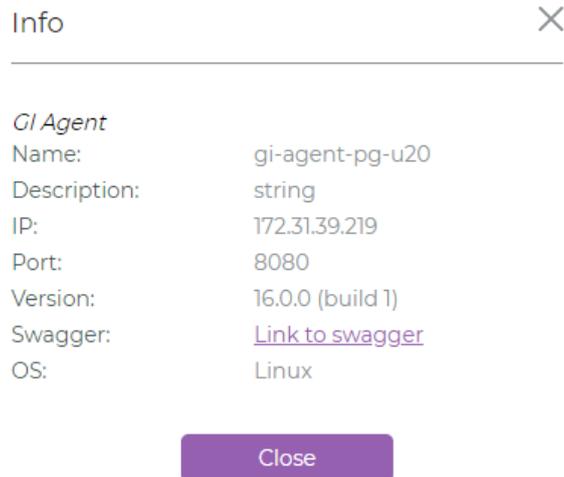
4. To save your changes, click **Modify**.

To see source host information:

1. Select the source host.
2. Click  (Source host info).



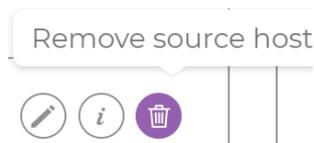
The **Info** window appears.



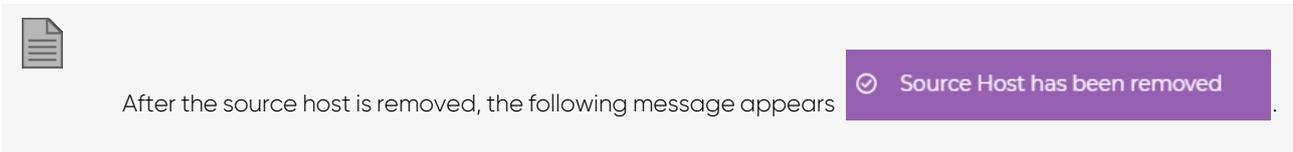
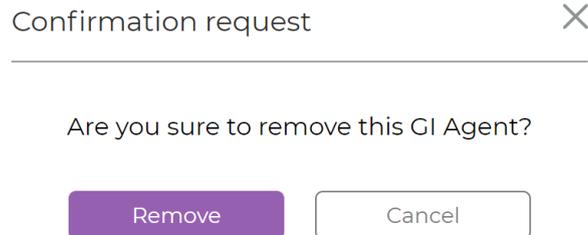
3. To return to the main **Source Management** work area, click **Close**.

To remove a source host:

1. Select the source host.
2. Click  (**Remove source host**).

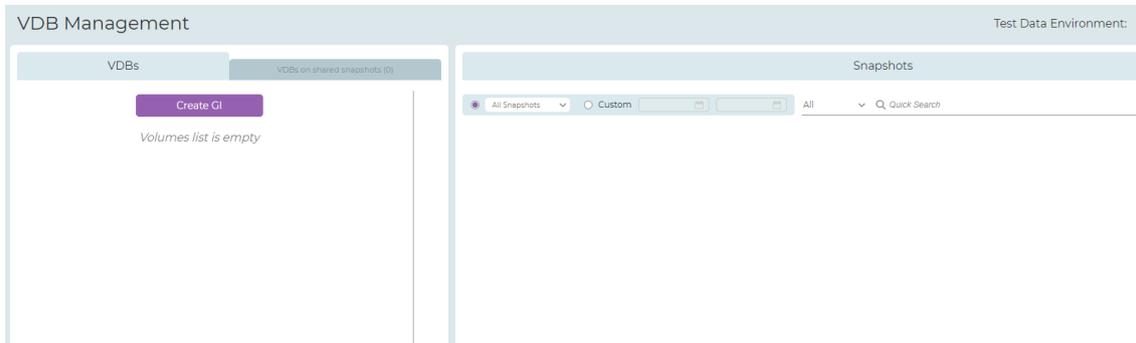


3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the source host.

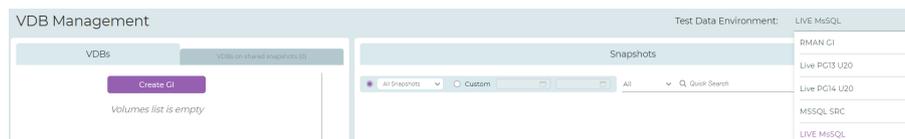


To create a test data environment from the VDB Management window:

1. Open the **VDB Management** window.



2. In the **VDB Management** window, select a **Test Data Environment**.



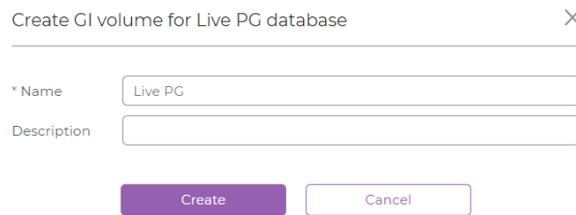
Live GI

To create a Live GI:

1. Click .



2. Enter a **Name**.



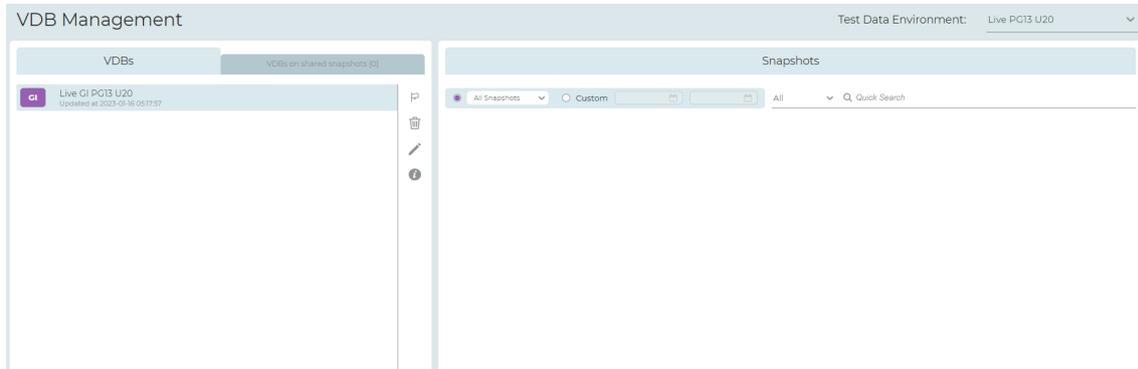
The dialog box is titled 'Create GI volume for Live PG database' and has a close button (X) in the top right corner. It contains two input fields: '* Name' with the value 'Live PG' and 'Description' which is empty. At the bottom, there are two buttons: 'Create' (purple) and 'Cancel' (white).

3. Click **Create**.

 After the GI is created, the following message appears

 Golden Image (live) has been created

The **VDB Management** window displays the GI that was created.



To create a test data environment:



To create a test data environment, see [To create a test data environment:](#).

To edit a test data environment:

1. Select the test data environment.
2. Click  (Modify Test Data environment).



2. The **Modify Test Data Environment** window appears. Modify the test data environment name if necessary.

Modify Test Data Environment PostgreSQL

* Name: Live PG

Description:

Next

3. Click **Next** to go to the next **Modify Test Data Environment** window.

To modify a Live GI:

1. Modify the **Golden Image Parameters** as required.

Modify Test Data Environment PostgreSQL

Golden Image Parameters

* GI Type: Live GI

* Source Host: gi-agent-pg-u20

Force creation

Snapshot Policy

Activate Snapshots

Repeat every: 0 Days

Start from: 17/01/2021 Choose time: 10:00 PM

Snapshot retention period (days): 180

Back Next

2. Click **Next** to go to the next **Modify Test Data Environment** window.
3. Modify the **Source DB Parameters** as required.

Modify Test Data Environment PostgreSQL

Source DB Parameters

* User: postgres

* Password:

* VDB password:

* Port: 5432

* Cluster Name: gi

* OS User: postgres

* PostgreSQL Home Dir: /usr/lib/postgresql/13

* Version: 13.8

Test Connection Back Modify

4. To save your changes, click **Modify**.

To see information about a test data environment:

1. Select the test data environment.
2. Click  (**Test Data Environment Info**).



The **Info** window appears.

Info ✕

Source Database

IP-Address:	172.31.39.219
Name:	Live PG
Description:	
Port:	5432
User:	postgres
Password:	*****
VDB Password:	*****
Version:	13.8
Type:	PG_GI_LIVE
GI Name:	gi-agent-pg-u20

[Close](#)

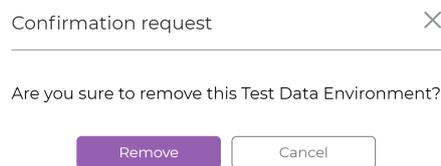
3. To return to the main **Source Management** work area, click **Close**.

To remove a test data environment:

1. Select the test data environment.
2. Click  (Remove Test Data Environment).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the test data environment.



After the database is removed, the following message appears

 Test Data Environment database has been removed

6.3. Target Management

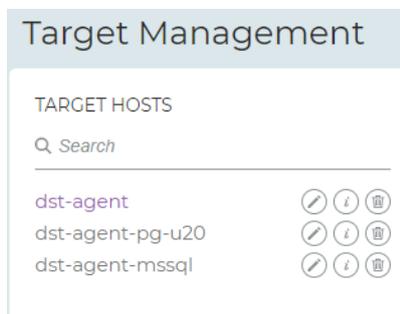
A test data environment includes access definition to one source database and a GI. A DB Home is the target database that is used to make VDBs.

To open the Target work area:

1. On the navigation bar, click  (Target).



The **Target Management** window appears displaying all the target hosts that have been added to the system.



You can quickly locate a target host by typing its letters on the **Search** bar. The list updates promptly.



Q Search

To add a target host:



To add a target host, see [To add a target host.](#)

To modify a target host:

1. Select the target host.
2. Click  Modify target host.

Modify target host



3. Modify the parameters as required.

Modify Target Host ✕

* OS: Linux Windows

* Name

Description

* Host

* Port

+ Advanced Parameters

4. To save your changes, click **Modify**.

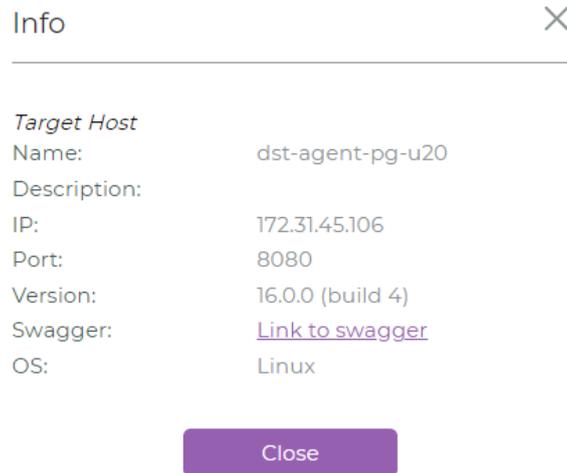
To see target host information:

1. Select the target host.
2. Click  (Target host info).

Target host info



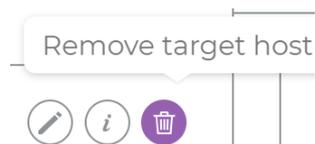
The **Info** window appears.



3. To return to the main **Target Management** work area, click **Close**.

To remove a target host:

1. Select the target host.
2. Click  (Remove target host).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the target host.

Confirmation request ✕

Are you sure to remove this Target Host?

Remove

Cancel



After the target host is removed, the following message appears

✔ Target Host has been removed

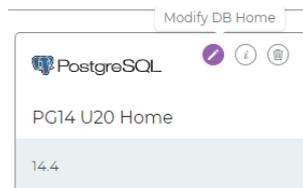
To add a DB Home:



To add an **DB Home**, see [To add a DB Home:](#)

To edit DB Homes:

1. Select the DB Home.
2. Click  (Modify DB Home).



3. The **Modify DB Home** window appears. Modify the test data environment details as required.

Modify DB Home PostgreSQL

* Name: PG13 U20 Home

Description: string

* Target Host: dst-agent-pg-u20

* PostgreSQL Home Dir: /usr/lib/postgresql/13

* Database version: 13.8

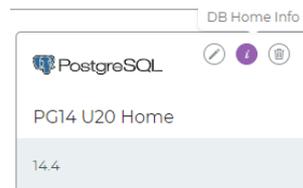
* OS User: postgres

Modify

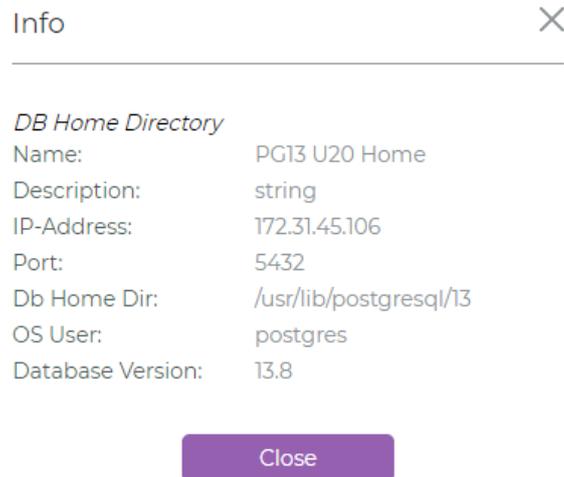
4. To save your changes, click **Modify**.

To see information about a DB Home:

1. Select the DB Home.
2. Click  (DB Home info).



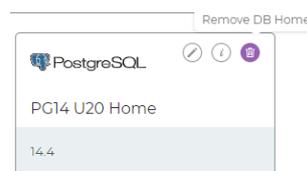
The **Info** window appears.



3. To return to the main **Target Management** work area, click **Close**.

To remove a DB Home:

1. Select the DB Home.
2. Click  (**Remove DB Home**).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the DB Home.

Confirmation request ✕

Are you sure to remove this DB Home?

Remove

Cancel



After the DB Home is removed, the following message appears

✔ DB Home has been removed

6.4. VDB Management

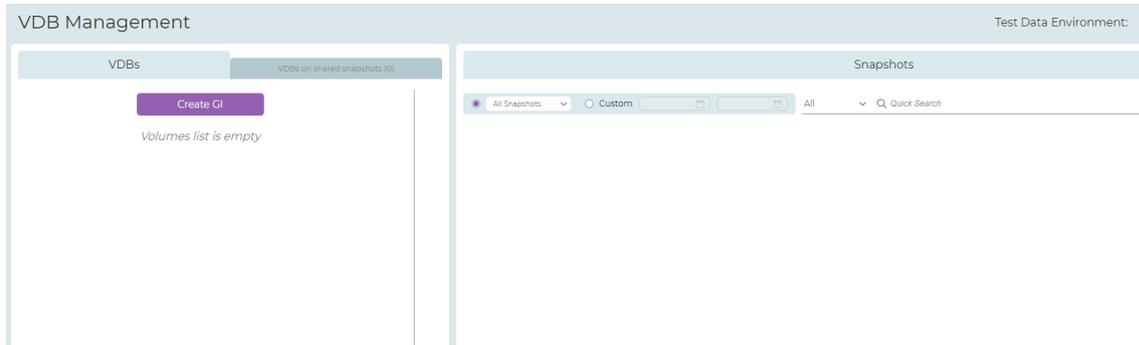
In the **VDB** work area, you do tasks for a golden image, a duplicate golden image, a VDB, and database snapshots. A golden image is a full synchronized copy of the source database files. A golden image is used to create VDBs. A snapshot is a read/write point-in-time copy of the golden image. This section describes how to do these tasks.

To open the VDB work area:

1. On the navigation bar, click  (VDB).



The **VDB Management** window appears.



To create VDB:



To create a VDB, see [To create and start a VDB](#).

To activate a GI:

1. Select the GI in the list.
2. Click  (Activate volume).



To remove a GI:

1. Select a GI in the list.
2. Click  (Remove Golden Image).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the volume.

Confirmation request ✕

Are you sure you want to remove this Golden Image?

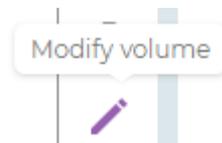


After the GI is removed, the following message appears

✔ Golden Image (live) has been deleted

To edit a GI:

1. Select the GI in the list.
2. Click  (Modify volume).



3. Enter a new **Name**.

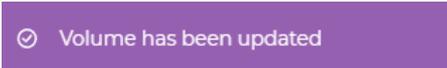
Modify Test Data Environment PostgreSQL X

* Name:

Description:

Next

4. To save your changes, click **Modify**. Otherwise, click **Cancel**.

 After the change is done, the following message appears 

To see information about a GI:

1. Select the GI in the list.
2. Click  (**Volume info**).



The **Info** window appears.

Info ✕

Volume Info

Name	Live GI PG14 U20
Description	pg_gi
Created At	2022-11-28 07:22:48.28
Storage Path	/main_pool/00000025

Connection Info

Agent's Name	gi-agent-pg-u20
Host	172.31.39.219
Port	5433
Service	
Username	postgres
Password	*****

- To see the last logs, click **Last Logs** or click **Cancel** to return to the VDB Management window.

Info ✕

```
[2022-11-28 12:38:40.369] [INFO] Stop Postgres Cluster completed successfully.
Execution output:
waiting for server to shut down.... done
server stopped
[2022-11-28 12:38:40.501] [INFO] Start Postgres Cluster completed successfully.
Execution output:
waiting for server to start.... done
server started
[2022-11-28 12:38:40.732] [INFO] Promote Postgres Cluster completed successfully.
Execution output:
waiting for server to promote.... done
server promoted
[2022-11-28 12:38:40.820] [INFO] PG DbUser password successfully altered.
[2022-11-28 12:38:41.087] [INFO] Executing create file by command line: sudo -Eu
postgres bash -c 'echo "/main_pool/3553837074" >
/main_pool/3553837074/pg_replication_started.flag'
[2022-11-28 12:38:41.104] [INFO] Create file by command line output:
[2022-11-28 12:38:41.105] [TRACE] Skip SqlPostScript execution. (expect
'PostSqlScriptPath' in 'AdvancedParam').
[2022-11-28 12:38:41.105] [TRACE] Skip 'post-script' execution. (expect
'PostOsScriptPath' in 'AdvancedParam').
```

BackDownloadCloseAuto-refresh

- Click **Auto-refresh** to do an auto refresh.
- To download the last logs, click **Download** or click **Close** to return to the VDB Management window.

6. To see the log history, click **Log History** or click **Cancel** to return to the **VDB Management** window.

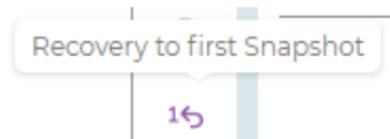


Log	Operation	Status
[2023-02-07 15:35:28]	Auto synchronization	OK
[2023-02-07 15:30:24]	Auto synchronization	OK
[2023-02-07 15:25:26]	Auto synchronization	OK
[2023-02-07 15:20:25]	Auto synchronization	OK
[2023-02-07 15:15:21]	Auto synchronization	OK
[2023-02-07 15:10:20]	Auto synchronization	OK
[2023-02-07 15:05:21]	Auto synchronization	OK
[2023-02-07 15:00:17]	Auto synchronization	OK
[2023-02-07 14:55:16]	Auto synchronization	OK
[2023-02-07 14:50:15]	Auto synchronization	OK
[2023-02-07 14:46:17]	Auto synchronization	OK
[2023-02-07 14:41:13]	Auto synchronization	OK
[2023-02-07 14:36:12]	Auto synchronization	OK
[2023-02-07 14:31:14]	Auto synchronization	OK
[2023-02-07 14:26:10]	Auto synchronization	OK
[2023-02-07 14:21:08]	Auto synchronization	OK
[2023-02-07 14:16:10]	Auto synchronization	OK
[2023-02-07 14:11:06]	Auto synchronization	OK
[2023-02-07 14:06:05]	Auto synchronization	OK
[2023-02-07 14:01:07]	Auto synchronization	OK
[2023-02-07 13:56:01]	Auto synchronization	OK

7. Click **Back** or **Cancel** to return to the **Info** window.

To recover to the first snapshot:

1. Select the source DB.
2. Click  (Recovery to first snapshot).



3. Click **Recovery** to confirm the recovery or **Cancel** to exit with recovering the snapshot.

Confirmation request ✕

All snapshots created after the first one will be deleted.
Are you sure to recovery to the first Snapshot?

Recovery

Cancel

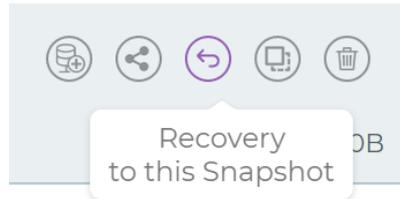


After all the snapshots are removed, the following message appears

✔ Volume has been recovered to the first snapshot

To recover to this snapshot:

1. Select the snapshot.
2. Click  (Recovery to this snapshot).



3. Click **Recover** to confirm the recovery or **Cancel** to exit with recovering the snapshot.

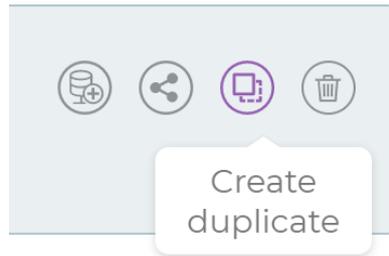


After the recover operation is complete, the following message appears

 Volume has been recovered

To create a duplicate VDB from a snapshot:

1. Select the snapshot.
2. Click  **Create duplicate**.



3. Enter a **Name**.

Create duplicate ×

* Name

Description

4. Click **Create**. Otherwise, click **Cancel** to exit without creating a duplicate VDB.

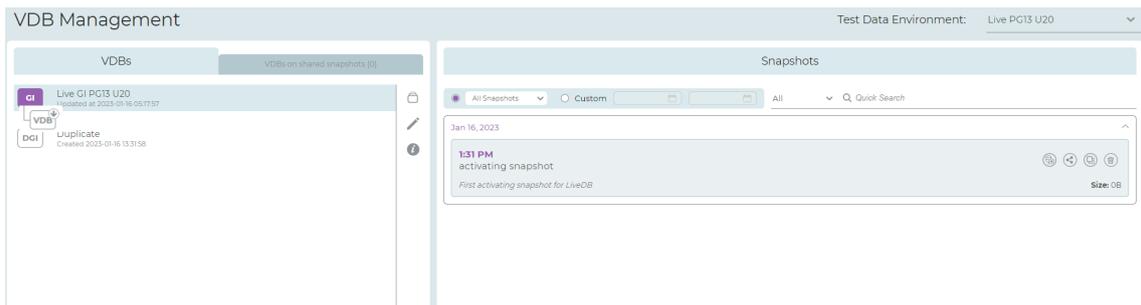
 During the creation of the duplicate GI, the following message appears

 Duplicate creation is in progress

 After the duplicate GI is created, the following message appears

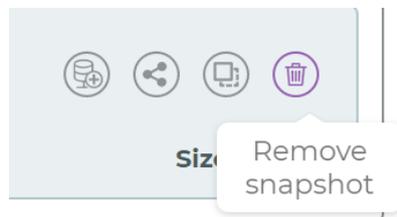
 Duplicate has been created

The **VDB Management** window displays the duplicate GI that has been created.



To remove a snapshot:

1. Select the snapshot.
2. Click  (Remove snapshot).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the snapshot.

Confirmation request ✕

Are you sure to remove this snapshot?

Remove

Cancel



After the snapshot is removed, the following message appears

✔ Snapshot has been deleted

VDB

This section describes additional tasks that are available to manage VDBs.

To start a VDB:

1. Select the VDB.
2. Click  (Start VDB).



3. Enter the VDB configuration parameters.

Start VDB ✕

* Name

Description

* Target DB Home

* Cluster Name

* DB Port

+ Advanced Parameters

4. Enter Advanced Parameters if necessary.

- Advanced Parameters

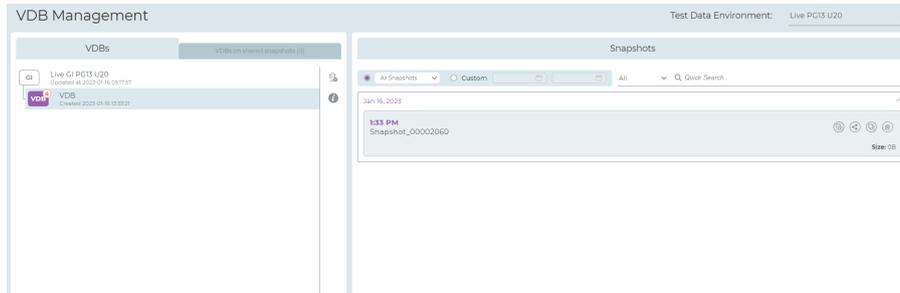
Pre/Post Scripts:

Pre OS script path:

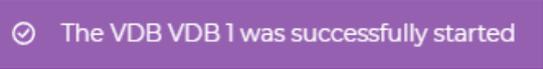
Post OS script path:

Post SQL script path:

5. Click **Start VDB**. Otherwise, click **Cancel** to exit.

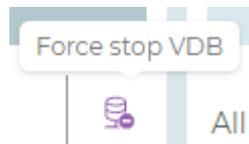


After the VDB was started, the following message appears

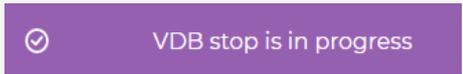


To force stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Force stop VDB).



During the force stop, the following message appears



After the force stop is complete, the following message appears



To stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Stop VDB).



During the stop, the following message appears



VDB stop is in progress



After the stop is complete, the following message appears



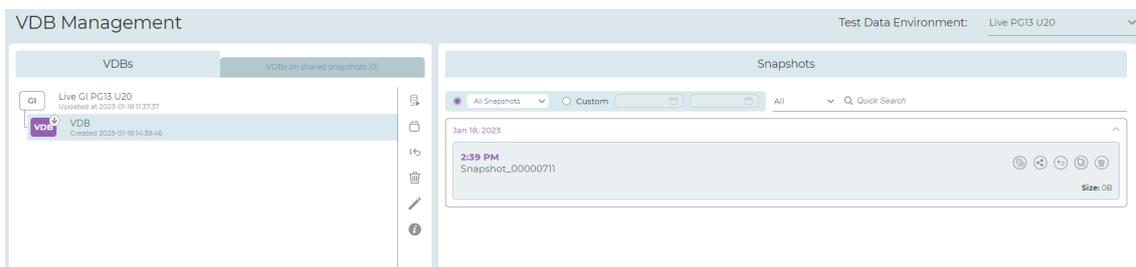
VDB has been stopped

6.5. Sharing Snapshots

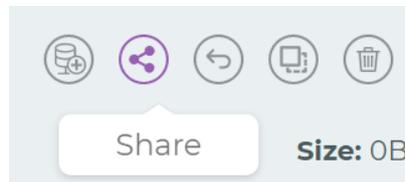
A user in one role category can share a snapshot with a user in another role category. This section gives the procedure. In the following example a user with a QA role shares a snapshot with a Dev role.

To share a VDB:

1. Select a snapshot of a Golden Image or a VDB.



2. Click  **Share** on a snapshot object.



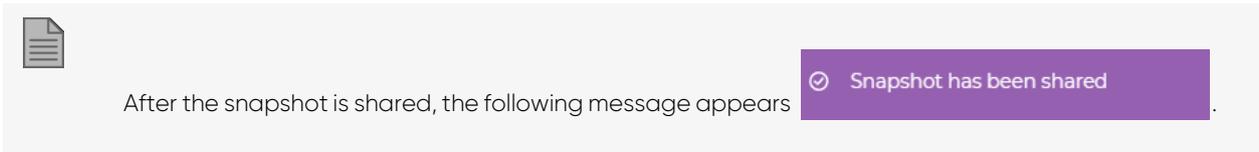
3. Select the role to share the snapshot.

Share/Unshare Snapshot ✕

* Select Roles:

Dev

4. Click **Submit**.



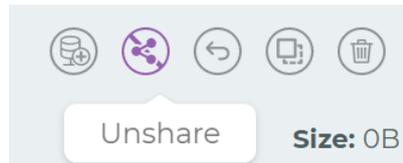
The **VDB Management** window displays the relevant sharing information.



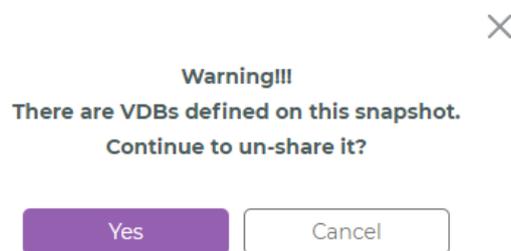
To unshare a snapshot:

1. Select the snapshot.

2. Click  **Unshare**.

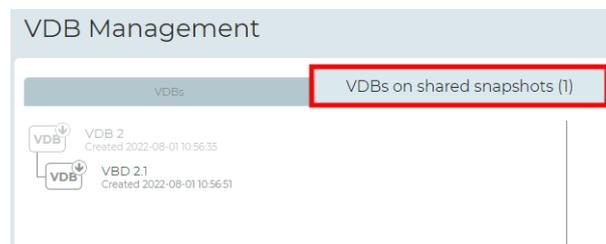


3. Click **Yes** to confirm unsharing the snapshot or **Cancel** to exit with unsharing the snapshot.



To see snapshots that are shared to you:

1. Click **VDBs on shared snapshots**.



7. Using an MS-SQL Data Base

The following sections from [Initial Setup](#) below to [Sharing Snapshots](#) are for MS-SQL users.

Return to [Getting to Know the GUI](#).

Continue to [Users Management](#).

7.1. Initial Setup

To setup the infrastructure in the Data Virtualization Module, do the following procedure:

1. [To install the Accelario source agent and target agent:](#)
2. [To add a target host:](#)
3. [To create a test data environment from a Native SQL server Backup:](#)
4. [To add a target host:](#)
5. [To add a DB Home:](#)
6. [To create and start a VDB.](#)

To install the Accelario source agent and target agent:

Accelario agents are deployed on a source server and on a target server. There are two types of agents:

1. GI (golden image) agent - installed on the source server.
2. Destination agent - installed on the target server.

When the VDB is used on the same server where the source DB resides, both agents can be installed on the same server. It is necessary to change the ports as described below.



- > The agents should be run as root.
- > The agents should be run in the background.

Example for a source agent.

```
screen -dmS gi_agent java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar &
```

Example for a target agent.

```
screen -dmS dst_agent java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

```
nohup java -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar &
```



The default port is 8080.

If necessary, the port can be changed. Use the following parameters to java execution:

Example for a source agent.

```
-Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092
```

Example for a target agent.

```
java -Ddw.server.applicationConnectors[0].port=8090 -Ddw.server.adminConnectors[0].port=8092 -jar ./dst_agent-1.0-SNAPSHOT.jar
```

To set the timezone for a java process:

To set the timezone for a java process, use the following code:

```
-Duser.timezone=<TimeZone> jvm command line option
```

Example for a source agent.

```
screen -dmS gi_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/gi_agent-1.0-SNAPSHOT.jar
```

Example for a target agent.

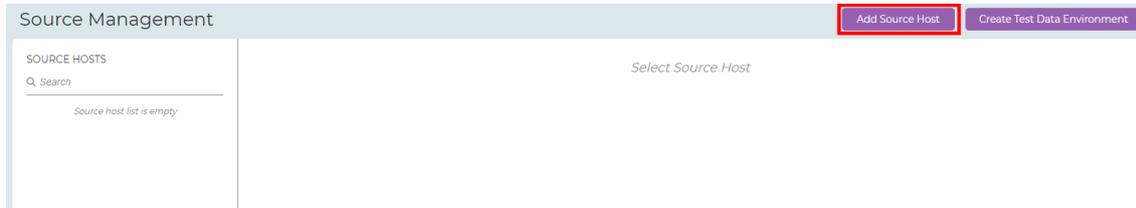
```
screen -dmS dst_agent java -Duser.timezone=America/Halifax -jar /home/ec2-user/dst_agent-1.0-SNAPSHOT.jar
```

To add a source host:

1. On the navigation bar, click  (Source).



The **Source Management** window appears.



2. Click **Add Source Host**.
3. Enter the source host details.



In all dialog boxes, an asterisk * next to a label on the left is used to identify a mandatory user input.

5. Click **Add**.



After the source host is added, the following message appears



The **Source Management** window displays the source host(s) that have been added to the system.

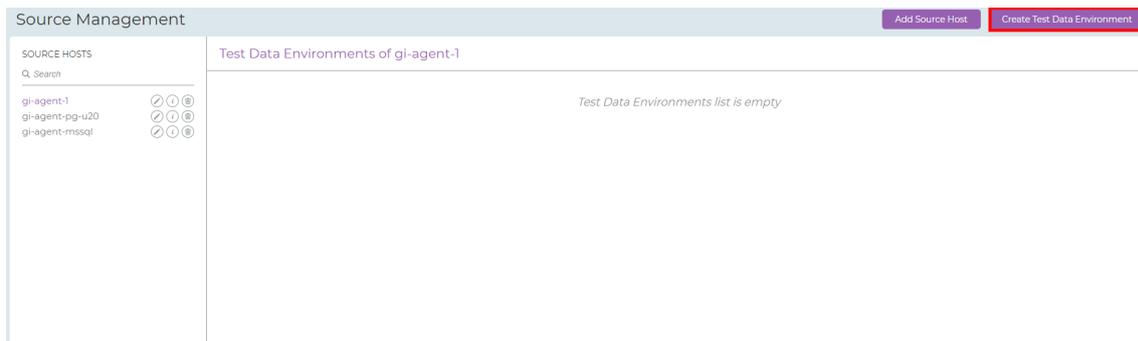


To create a test data environment:

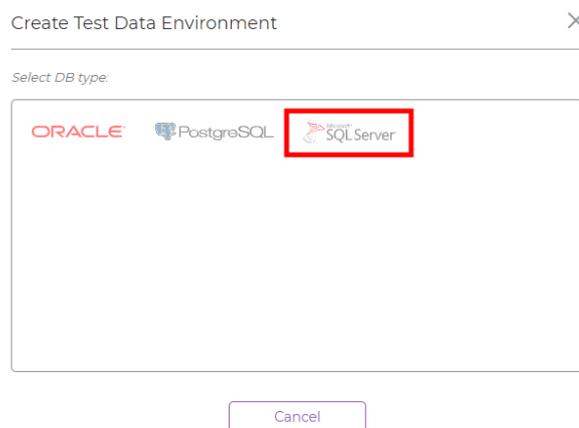
1. On the navigation bar, click  (Source).



The Source Management window appears.



2. Click **Create Test Data Environment**.
3. Select DB type.



4. Enter a **Name**.

Create Test Data Environment  ×

* Name:

Description:

5. Click **Next**.

To create a test data environment from a LIVE GI:

1. Enter the test data environment details.

2. Select a storage type:
 - a. iSCSI

Create Test Data EnvironmentMicrosoft SQL Server✕

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Force creation

Storage Protocol

* Storage Type: iSCSI NFS

* Capacity (GB):

User (optional):

Password (optional):

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):



For iSCSI storage type it is necessary in the **Capacity** field to enter the capacity in GB.

b. NFS

Create Test Data Environment  X

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Force creation

Storage Protocol

* Storage Type: ISCSI NFS

User (optional):

Password (optional):

Snapshot Policy

Activate Snapshots

Repeat every: Hours

Start from: Choose time:

Snapshot retention period (days):

3. Click **Next**.

4. Enter the **Source DB Parameters**.

Create Test Data Environment  X

Source DB Parameters

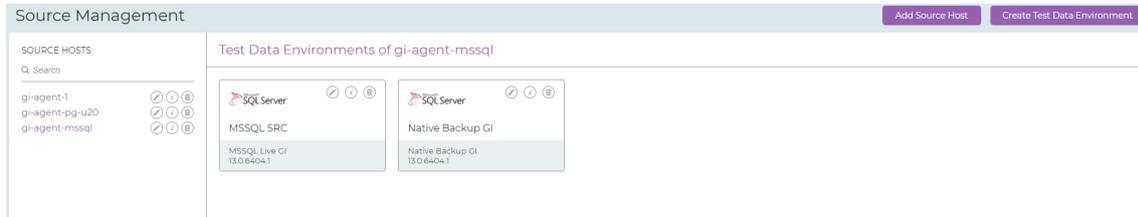
* Instance Name:

* Database Name:

* Version:

5. Click **Create**.

The **Source Management** window displays the test data environment for the source host that has been created.



To create a test data environment from a Native SQL server Backup:

1. Enter the test data environment details.

2. Select a storage type:
 - a. iSCSI

Create Test Data Environment  ✕

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Force creation

Storage Protocol

* Storage Type: iSCSI NFS

* Capacity (GB):

User (optional):

Password (optional):

Snapshot Policy

A snapshot will be automatically taken after each successful restore

Snapshot retention period (days):



For iSCSI storage type it is necessary in the **Capacity** field to enter the capacity in GB.

b. NFS

Create Test Data Environment  ✕

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Force creation

Storage Protocol

* Storage Type: ISCSI NFS

User (optional):

Password (optional):

Snapshot Policy

A snapshot will be automatically taken after each successful restore

Snapshot retention period (days):

3. Click **Next**.

4. Enter the Source DB Parameters.

Create Test Data Environment  X

Source DB Parameters

* Instance Name:

* Database Name:

* Version:

Initial Load Parameters

Initial load will be performed automatically

* Customer backup folder path:

* Network path login:

* Network path password:



It is recommended to select the **Refresh immediately** checkbox to make a full copy of the Golden Image after the test data environment is automatically created.

5. Click **Test Connection** to verify that the connection to the database is valid.



After the test is complete, the following message appears

Test Data Environment connection is valid

6. Click **Done**.



After the test data environment is created, the following message appears

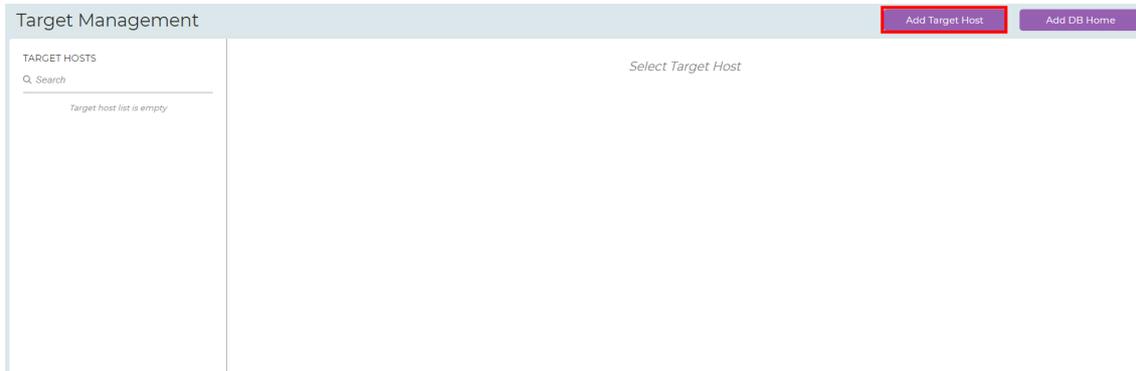
Test Data Environments has been created

To add a target host:

1. On the navigation bar, click  (Target).

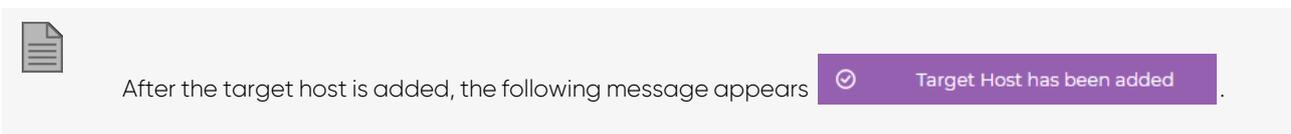


The **Target Management** window appears.

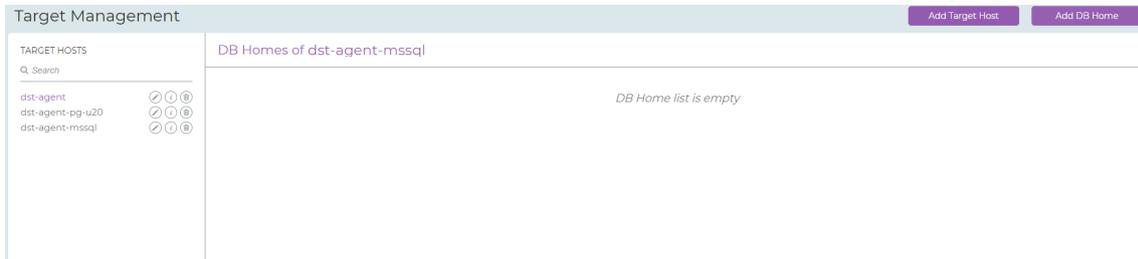


2. Click **Add Target Host**.
3. Enter the target host details.

4. Click **Add**.



The **Target Management** displays the target host(s) that have been added to the system.

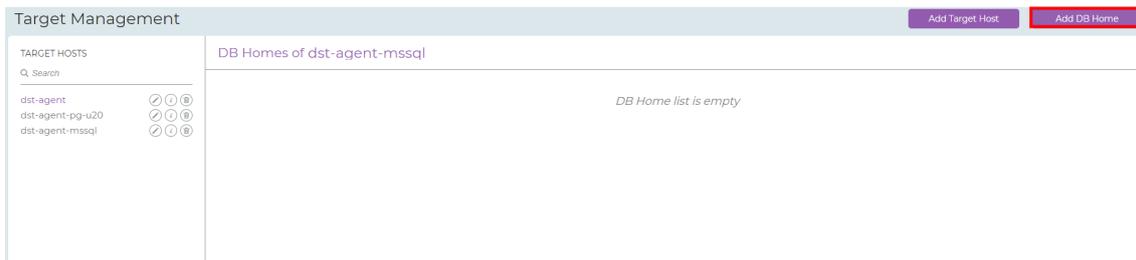


To add a DB Home:

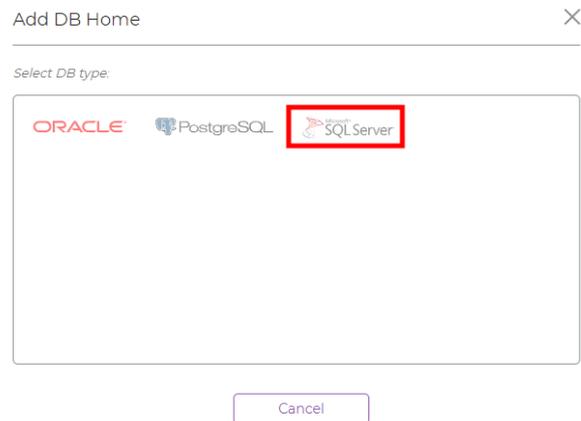


You add a **DB Home** in the **Target** work area.

1. Click **Add DB Home**.

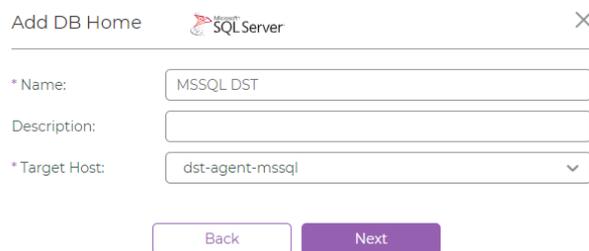


2. Select a DB type.



The screenshot shows a dialog box titled "Add DB Home" with a close button (X) in the top right corner. Below the title bar, the text "Select DB type:" is displayed. A large rectangular area contains three database logos: "ORACLE" in red, "PostgreSQL" with its logo, and "SQL Server" with its logo. The "SQL Server" logo and text are enclosed in a red rectangular box, indicating it is the selected option. Below this area is a "Cancel" button.

3. Enter the DB Home details.



The screenshot shows the same "Add DB Home" dialog box, but now with the "SQL Server" logo and text in the top right corner. The dialog contains three input fields: "* Name:" with the text "MSSQL DST", "Description:" which is empty, and "* Target Host:" with a dropdown menu showing "dst-agent-mssql". At the bottom, there are two buttons: "Back" and "Next".

4. Click **Next** to go to the next **Add DB Home** window.

Add DB Home  X

* Instance Name: MSSQLSERVER

* VDB User: msDbUser

* VDB Password:

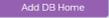
* Database version: 2016

Back Add

5. To save your changes, click **Add**.

After the DB Home is added, the following message appears 

The **Target Management** displays the DB Home(s) that have been added to the system.

Target Management  

TARGET HOSTS

Q Search

dst-agent 

dst-agent-pg-u20 

dst-agent-mssql 

DB Homes of dst-agent-mssql

MSSQL DST

13.0.6404.1

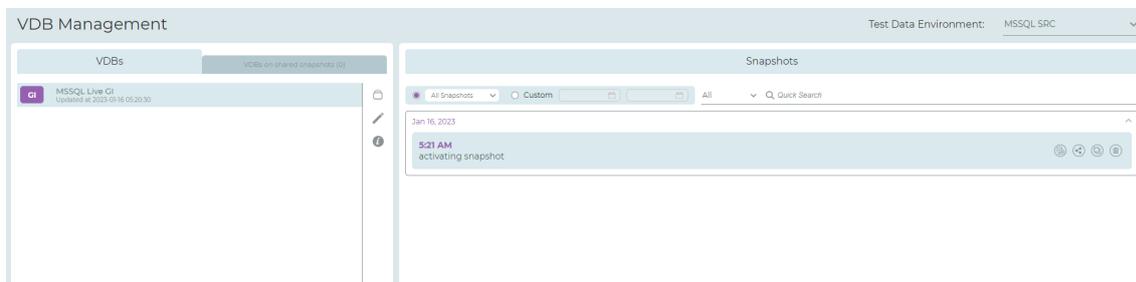
To create and start a VDB.

To create a VDB:

1. On the navigation bar, click  (VDB).

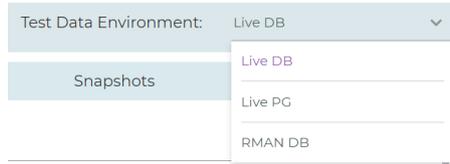


The VDB Management window appears.

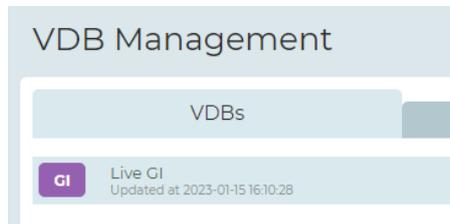


To select a GI:

1. In the **VDB Management** window, select a Test Data Environment.

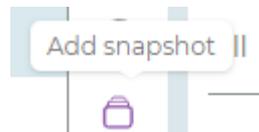


2. Select the GI.



Adding a snapshot:

1. Select the source.
2. Click  (Add snapshot).



3. Enter a **Name**.

Add Snapshot ✕

* Name

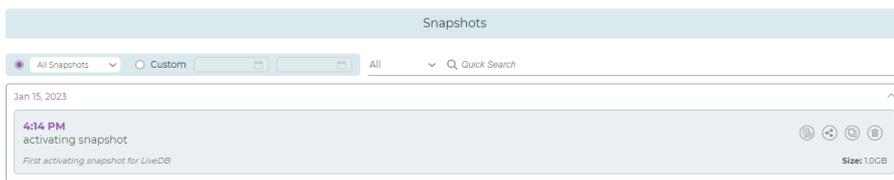
Description

4. Click **Add**.

 After the snapshot is created, the following message appears

✔ Snapshot has been created.

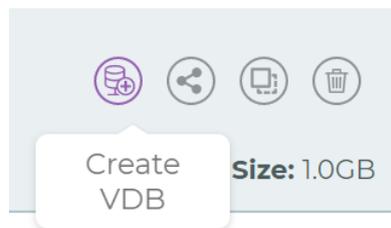
The **Snapshots** work area displays the new snapshot with all the snapshots that have been created.



 It is possible to scroll using the time and date to the right of a search screenshot.

To create a VDB from a snapshot:

1. Select a snapshot.
2. Click  **Create VDB**.



3. Enter the VDB parameters.

Create VDB  ✕

* Name

Description

Start Immediately

* Target DB Home

* Instance Name

* Database Name

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

+ Advanced Parameters



It is recommended to select the **Start Immediately** checkbox.

4. Enter the **Advanced Parameters**, if necessary.

- Advanced Parameters

Pre/Post Scripts:

Pre OS script path:

Post OS script path:

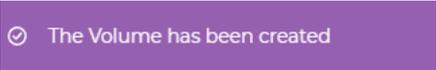
Post SQL script path:



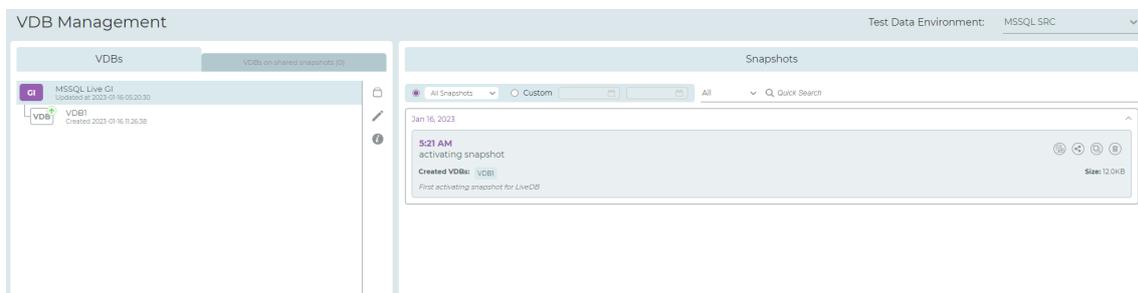
For more information about **Advanced Parameters**, see [To add an advanced parameter](#).

5. Click **Create**. Otherwise, click **Cancel** to exit without creating a VDB.

After the VDB is created, the following message appears



The **VDB Management** window displays the VDB that has been created.



The following icons display information about a VDB:

Icon	Description
	VDB Locked
	VDB Stopped
	VDB Started
	VDB Creation Failed

7.2. Source Management

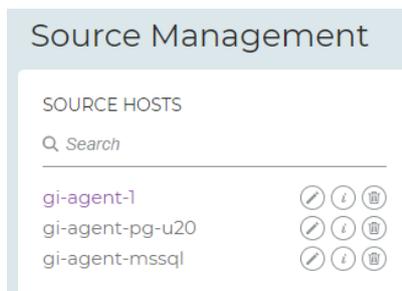
A source host is a server that hosts the source databases. A test data environment includes access definition to one source database and a GI. This section describes how to create and manage a **Source Host** and a **Test Data Environment**.

To open the Source work area:

1. On the navigation bar, click  (Source).



The **Source Hosts** window appears displaying all the source hosts that have been added to the system.





You can quickly locate a source host by typing its letters on the **Search** bar. The list updates promptly.

 Search



To add a source host, see

To modify a source host:

1. Select the source host.
2. Click  (Modify source host).

Modify source host



3. Modify the source host as required.

Modify Source Host ✕

* OS: Linux Windows

* Name

Description

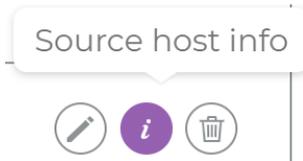
* Host

* Port

4. To save your changes, click **Modify**.

To see source host information:

1. Select the source host.
2. Click  (Source host info).



The **Info** window appears.

Info ×

GI Agent

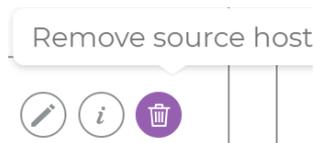
Name:	gi-agent-mssql
Description:	string
IP:	172.31.43.118
Port:	8080
Version:	16.0.0 (build 1)
Swagger:	Link to swagger
OS:	Windows Server 2012 R2

[Close](#)

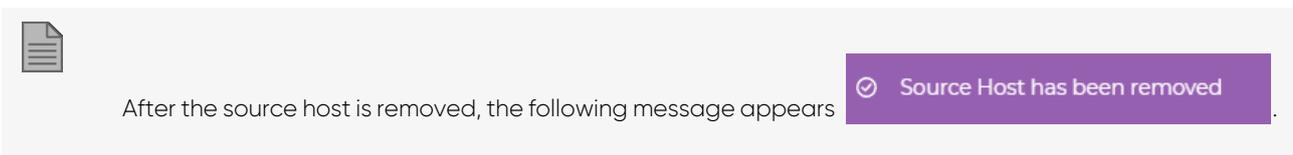
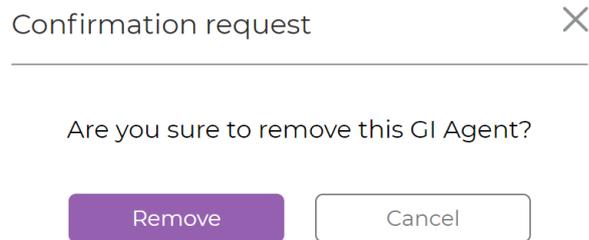
3. To return to the main **Source Management** work area, click **Close**.

To remove a source host:

1. Select the source host.
2. Click  (Remove source host).

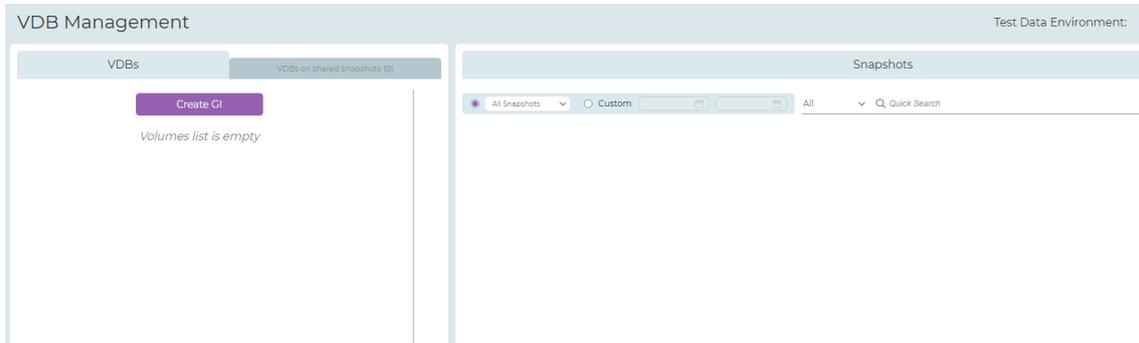


3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the source host.



The create a test data environment from the VDB Management window:

1. Open the **VDB Management** window.



2. In the **VDB Management** window, select a **Test Data Environment**.



Live GI

To create a Live GI:

1. Click **Create LIVE GI**.
2. Enter a **Name**.

Create GI volume for Live database ✕

* Name

Description

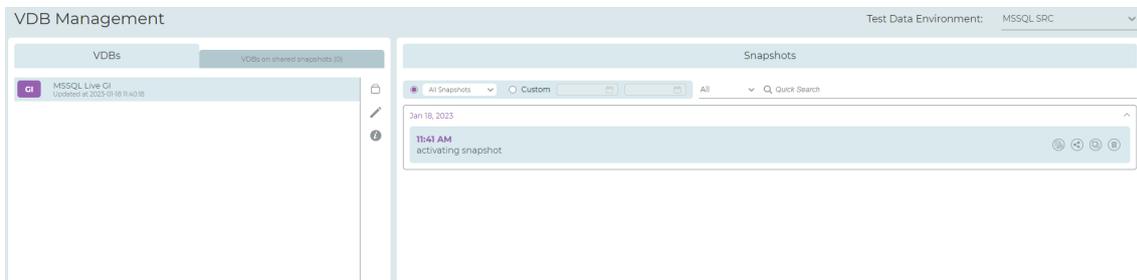
3. Click **Create**.



After the GI is created, the following message appears

✔ Golden Image (live) has been created

The **VDB Management** window displays the GI that was created.



SQL Native Server Backup

To create a SQL Native Server Backup:

1. Click **Create GI**.



2. Enter a **Name**.

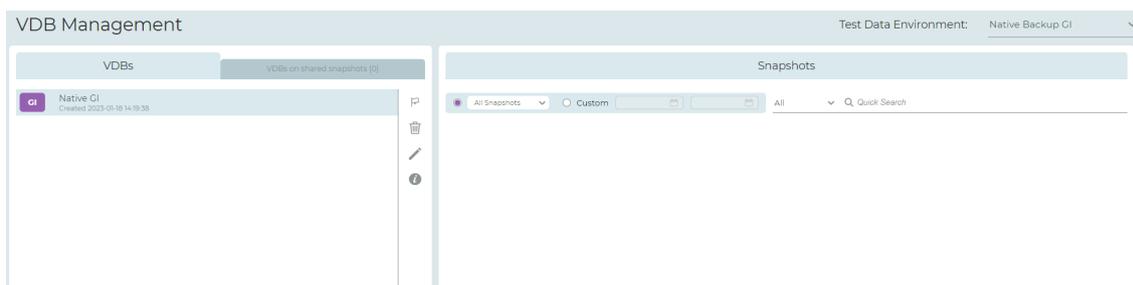
Create GI volume for Live database ✕

* Name

Description

3. Click **Create**.

The **VDB Management** window displays the GI that was created.

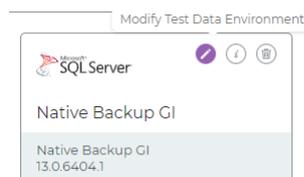


To create a test data environment:

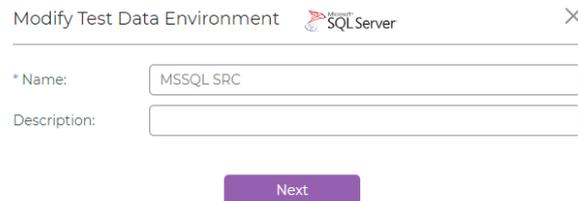
 To create a test data environment, see [To create a test data environment:](#).

To edit a test data environment:

1. Select the test data environment.
2. Click  (Modify Test Data environment).



2. The **Modify Test Data Environment** window appears. Modify the test data environment name if necessary.



Modify Test Data Environment  X

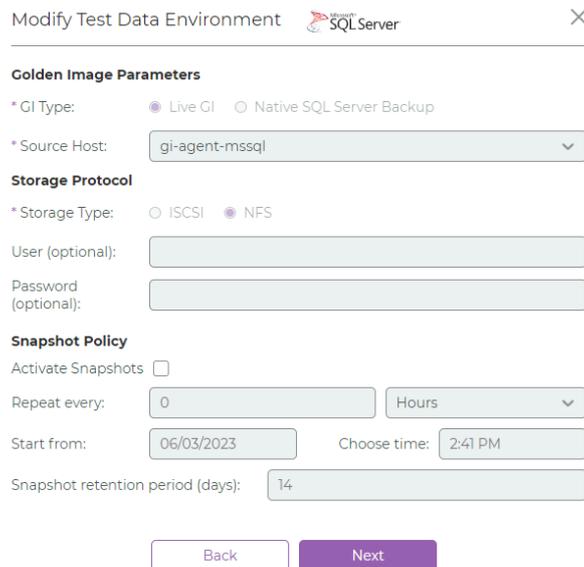
* Name:

Description:

3. Click **Next** to go to the next **Modify Test Data Environment** window.

To modify a Live GI:

1. Modify the **Golden Image Parameters** as required.



Modify Test Data Environment  X

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Storage Protocol

* Storage Type: ISCSI NFS

User (optional):

Password (optional):

Snapshot Policy

Activate Snapshots

Repeat every:

Start from: Choose time:

Snapshot retention period (days):

2. Click **Next** to go to the next **Modify Test Data Environment** window.
3. Modify the **Source DB Parameters** as required.

Modify Test Data Environment  ✕

Source DB Parameters

* Instance Name:

* Database Name:

* Version:

4. To save your changes, click **Modify**.

To modify a native SQL Server Backup:

1. Modify the **Golden Image Parameters** as required.

Modify Test Data Environment  ✕

Golden Image Parameters

* GI Type: Live GI Native SQL Server Backup

* Source Host:

Storage Protocol

* Storage Type: ISCSI NFS

User (optional):

Password (optional):

Snapshot Policy

A snapshot will be automatically taken after each successful restore

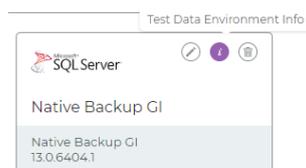
Snapshot retention period (days):

2. Click **Next** to go to the next **Modify Test Data Environment** window.
3. Modify the **Source DB Parameters** as required.

4. To save your changes, click **Modify**.

To see information about a test data environment:

1. Select the test data environment.
2. Click  (Test Data Environment Info).



The **Info** window appears.

Info ✕

Source Database

IP-Address: 172.31.43.118

Name: Native Backup GI

Description:

Version: 13.0.6404.1

Type: MSSQL_GL_NATIVE_BACKUP

Instance Name: native_src

Database Name: AdventureWorks2016_DEV

Backup Path: \\172.31.37.190\Backup

Backup Login: Administrator

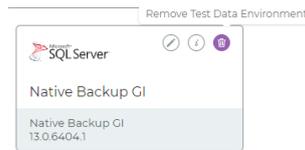
Backup Password: u.P7UO9hgZSKuVYeqNT\$r%x%Fko6%gzy

Close

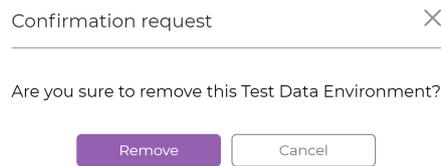
3. To return to the main **Source Management** work area, click **Close**.

To remove a test data environment:

1. Select the test data environment.
2. Click  (Remove Test Data Environment).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the test data environment.



After the database is removed, the following message appears

 Test Data Environment database has been removed

7.3. Target Management

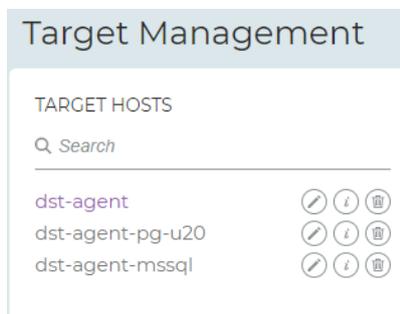
A test data environment includes access definition to one source database and a GI. A DB Home is the target database that is used to make VDBs.

To open the Target work area:

1. On the navigation bar, click  (Target).



The **Target Management** window appears displaying all the target hosts that have been added to the system.



You can quickly locate a target host by typing its letters on the **Search** bar. The list updates promptly.



Q Search

To add a target host:



To add a target host, see [To add a target host.](#)

To modify a target host:

1. Select the target host.
2. Click  Modify target host.



3. Modify the parameters as required.

Modify Target Host ×

* OS: Linux Windows

* Name

Description

* Host

* Port

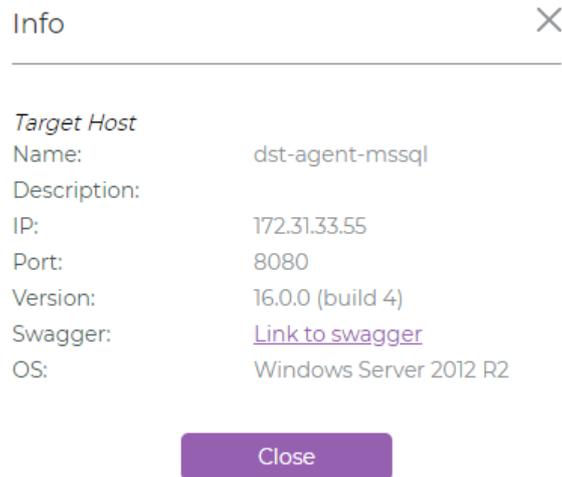
4. To save your changes, click **Modify**.

To see target host information:

1. Select the target host.
2. Click  (Target host info).

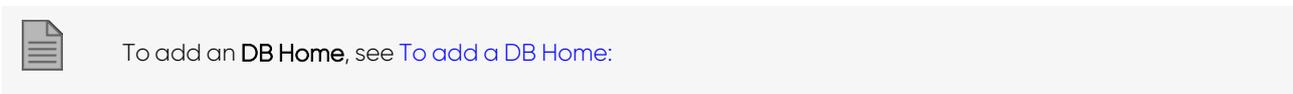


The **Info** window appears.



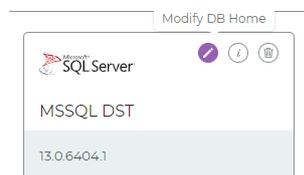
3. To return to the main **Target Management** work area, click **Close**.

To add a DB Home:



To edit DB Homes:

1. Select the DB Home.
2. Click  (Modify DB Home).



3. The **Modify DB Home** window appears. Modify the test data environment details as required.

Modify DB Home ✕

* Name:

Description:

* Target Host:

4. Click **Next** to go to the next **Modify DB Home** window.

Modify DB Home ✕

* Instance Name:

* VDB User:

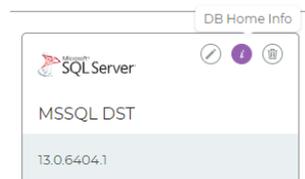
* VDB Password:

* Database version:

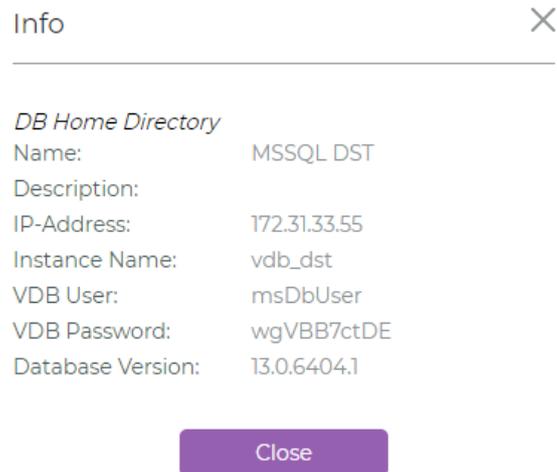
5. To save your changes, click **Modify**.

To see information about a DB Home:

1. Select the DB Home.
2. Click  (DB Home info).



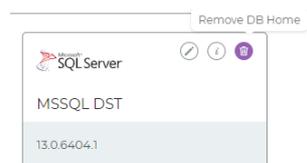
The **Info** window appears.



3. To return to the main **Target Management** work area, click **Close**.

To remove a DB Home:

1. Select the DB Home.
2. Click  (**Remove DB Home**).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the DB Home.

Confirmation request ✕

Are you sure to remove this DB Home?

Remove

Cancel



After the DB Home is removed, the following message appears

✔ DB Home has been removed

7.4. VDB Management

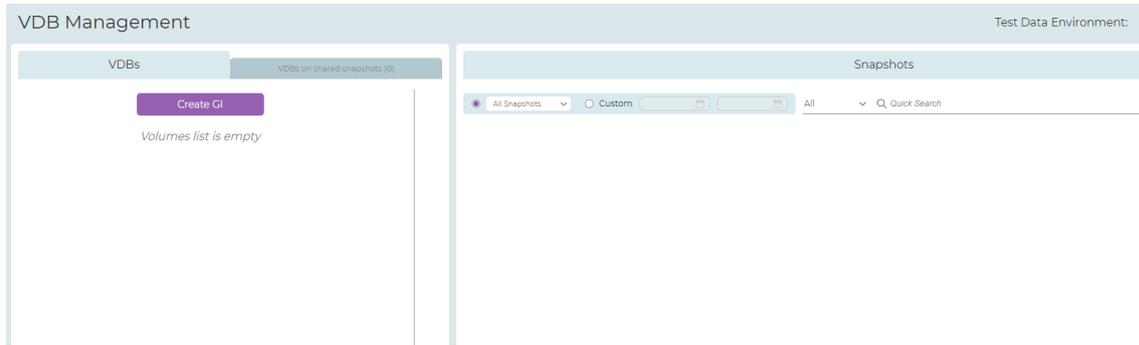
In the **VDB** work area, you do tasks for a golden image, a duplicate golden image, a VDB, and database snapshots. A golden image is a full synchronized copy of the source database files. A golden image is used to create VDBs. A snapshot is a read/write point-in-time copy of the golden image. This section describes how to do these tasks.

To open the VDB work area:

1. On the navigation bar, click  (VDB).



The **VDB Management** window appears.



To create VDB:



To create a VDB, see [To create and start a VDB](#).

To activate a GI:

1. Select the GI in the list.

2. Click  (Activate volume).



To remove a GI:

1. Select a GI in the list.

2. Click  (Remove Golden Image).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the volume.

Confirmation request ✕

Are you sure you want to remove this Golden Image?



After the GI is removed, the following message appears

✔ Golden Image (live) has been deleted

To edit a GI:

1. Select the GI in the list.
2. Click  (Modify volume).



3. Enter a new **Name**.



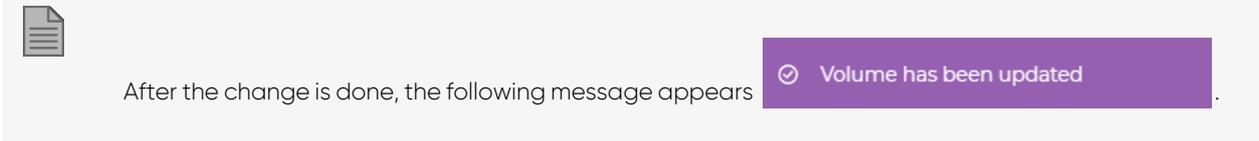
Modify Test Data Environment  X

* Name:

Description:

Next

4. To save your changes, click **Modify**. Otherwise, click **Cancel**.



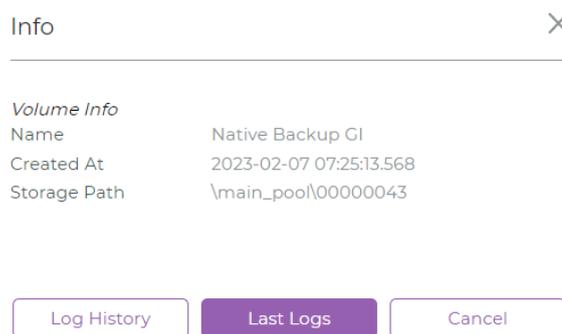
After the change is done, the following message appears  Volume has been updated

To see information about a GI:

1. Select the GI in the list.
2. Click  (**Volume info**).



The **Info** window appears.



Info X

Volume Info

Name	Native Backup GI
Created At	2023-02-07 07:25:13.568
Storage Path	\main_pool\00000043

Log History Last Logs Cancel

- To see the last logs, click **Last Logs** or click **Cancel** to return to the VDB Management window.

Info ✕

```
[2023-02-07 13:35:18.806] [INFO]    GI Agent artifactVersion=16.0.0, buildNumber=1
[2023-02-07 13:35:18.806] [INFO]    Start MSSQL auto sync procedure.
[2023-02-07 13:35:25.472] [INFO]    MSSQL auto sync scripts executed successfully.
Script output: VERBOSE: M Drive successfully mounted
VERBOSE: Starting to restore Transaction Log Backup with name:
AdventureWorks2016_DEV_TRN_07022023_1335.trn
VERBOSE: 100 percent processed.
VERBOSE: Processed 0 pages for database 'AdventureWorks2016_DEV', file
'AdventureWorks2016_Data' on file 1.
VERBOSE: Processed 4 pages for database 'AdventureWorks2016_DEV', file
'AdventureWorks2016_Log' on file 1.
VERBOSE: RESTORE LOG successfully processed 4 pages in 0.011 seconds (2.840 MB/sec).
VERBOSE: AdventureWorks2016_DEV_TRN_07022023_1335.trn Log backup successfully restored
VERBOSE: M Drive successfully unmounted
```

BackDownloadCloseAuto-refresh

- Click **Auto-refresh** to do an auto refresh.
- To download the last logs, click **Download** or click **Close** to return to the VDB Management window.

6. To see the log history, click **Log History** or click **Cancel** to return to the **VDB Management** window.

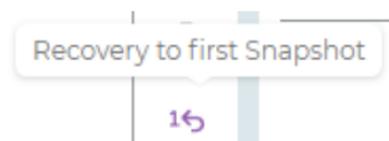


Log	Operation	Status
[2023-02-07 15:35:28]	Auto synchronization	OK
[2023-02-07 15:30:24]	Auto synchronization	OK
[2023-02-07 15:25:26]	Auto synchronization	OK
[2023-02-07 15:20:25]	Auto synchronization	OK
[2023-02-07 15:15:21]	Auto synchronization	OK
[2023-02-07 15:10:20]	Auto synchronization	OK
[2023-02-07 15:05:21]	Auto synchronization	OK
[2023-02-07 15:00:17]	Auto synchronization	OK
[2023-02-07 14:55:16]	Auto synchronization	OK
[2023-02-07 14:50:15]	Auto synchronization	OK
[2023-02-07 14:46:17]	Auto synchronization	OK
[2023-02-07 14:41:13]	Auto synchronization	OK
[2023-02-07 14:36:12]	Auto synchronization	OK
[2023-02-07 14:31:14]	Auto synchronization	OK
[2023-02-07 14:26:10]	Auto synchronization	OK
[2023-02-07 14:21:08]	Auto synchronization	OK
[2023-02-07 14:16:10]	Auto synchronization	OK
[2023-02-07 14:11:06]	Auto synchronization	OK
[2023-02-07 14:06:05]	Auto synchronization	OK
[2023-02-07 14:01:07]	Auto synchronization	OK
[2023-02-07 13:56:01]	Auto synchronization	OK

7. Click **Back** or **Cancel** to return to the **Info** window.

To recover to the first snapshot:

1. Select the source DB.
2. Click  (Recovery to first snapshot).



3. Click **Recovery** to confirm the recovery or **Cancel** to exit with recovering the snapshot.

Confirmation request ✕

All snapshots created after the first one will be deleted.
Are you sure to recovery to the first Snapshot?

Recovery

Cancel

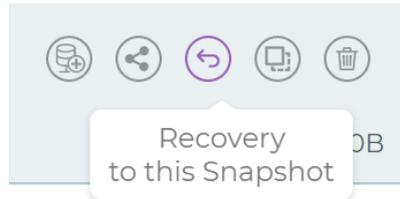


After all the snapshots are removed, the following message appears

✔ Volume has been recovered to the first snapshot

To recover to this snapshot:

1. Select the snapshot.
2. Click  (Recovery to this snapshot).



3. Click **Recover** to confirm the recovery or **Cancel** to exit with recovering the snapshot.

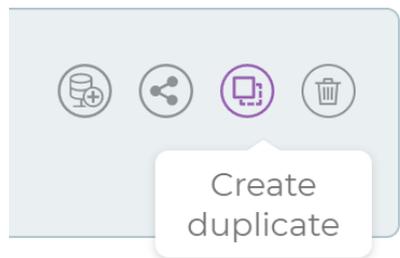


 After the recover operation is complete, the following message appears

 Volume has been recovered

To create a duplicate VDB from a snapshot:

1. Select the snapshot.
2. Click  **Create duplicate**.



3. Enter a **Name**.

Create duplicate ✕

* Name

Description

4. Click **Create**. Otherwise, click **Cancel** to exit without creating a duplicate VDB.



During the creation of the duplicate GI, the following message appears

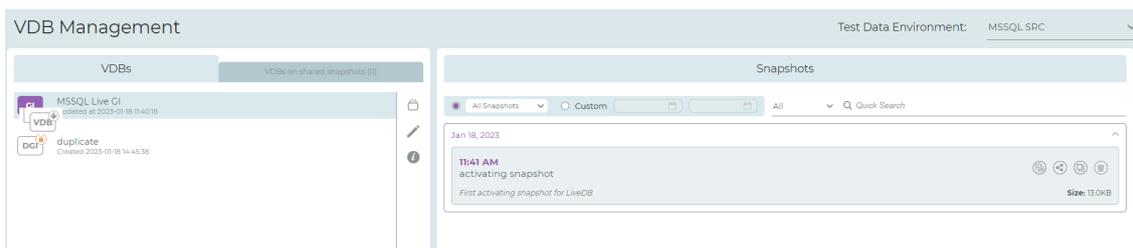
Duplicate creation is in progress



After the duplicate GI is created, the following message appears

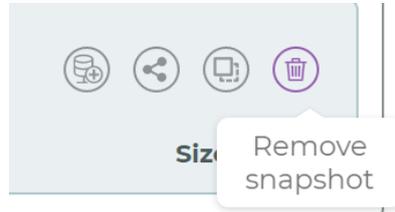
Duplicate has been created

The **VDB Management** window displays the duplicate GI that has been created.

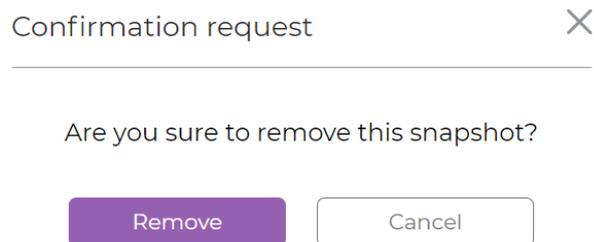


To remove a snapshot:

1. Select the snapshot.
2. Click (Remove snapshot).



3. Click **Remove** to confirm the deletion or **Cancel** to exit with deleting the snapshot.



VDB

This section describes additional tasks that are available to manage VDBs.

To start a VDB:

1. Select the VDB.
2. Click  (Start VDB).



3. Enter the VDB configuration parameters.

Start VDB  ✕

* Name

Description

* Target DB Home ▼

* Instance Name

* Database Name

+ Advanced Parameters

4. Enter Advanced Parameters if necessary.

- Advanced Parameters

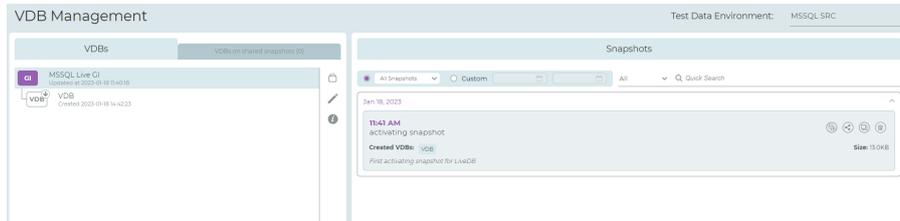
Pre/Post Scripts:

Pre OS script path:

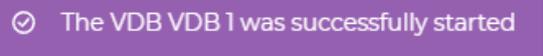
Post OS script path:

Post SQL script path:

5. Click **Start VDB**. Otherwise, click **Cancel** to exit.

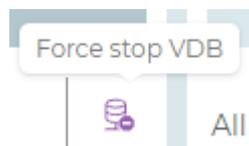


After the VDB was started, the following message appears



To force stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Force stop VDB).



During the force stop, the following message appears



VDB stop is in progress



After the force stop is complete, the following message appears



VDB has been stopped

To stop the refresh of a VDB:

1. Select the VDB.
2. Click  (Stop VDB).



During the stop, the following message appears



VDB stop is in progress



After the stop is complete, the following message appears



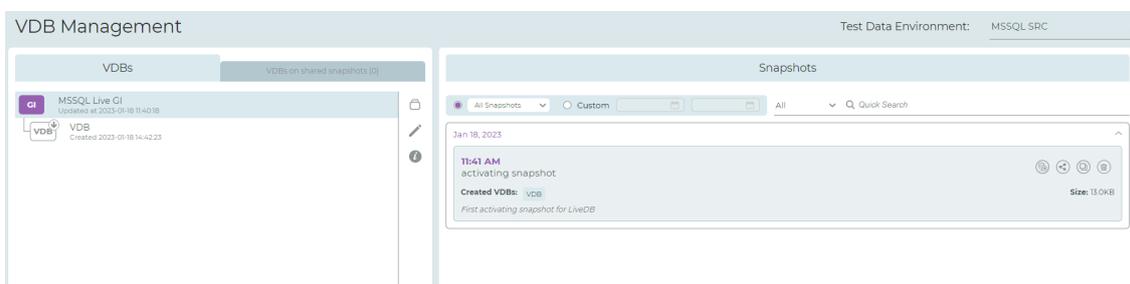
VDB has been stopped

7.5. Sharing Snapshots

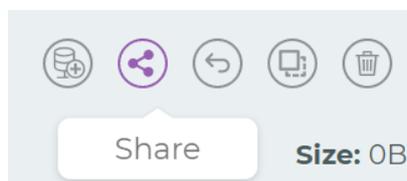
A user in one role category can share a snapshot with a user in another role category. This section gives the procedure. In the following example a user with a QA role shares a snapshot with a Dev role.

To share a VDB:

1. Select a snapshot of a Golden Image or a VDB.



2. Click  **Share** on a snapshot object.



3. Select the role to share the snapshot.

Share/Unshare Snapshot ✕

* Select Roles:

Dev

4. Click **Submit**.

 After the snapshot is shared, the following message appears ✔ Snapshot has been shared

The **VDB Management** window displays the relevant sharing information.

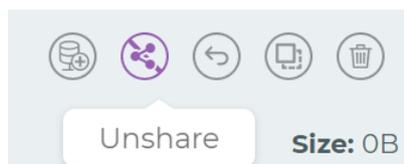
12:04 PM
Snapshot_00001691 🔍 🔄 ⏪ ⏩ 🗑️ **Size:** 0B

Shared to QA by admin Jan 16, 2023, 14:10 PM

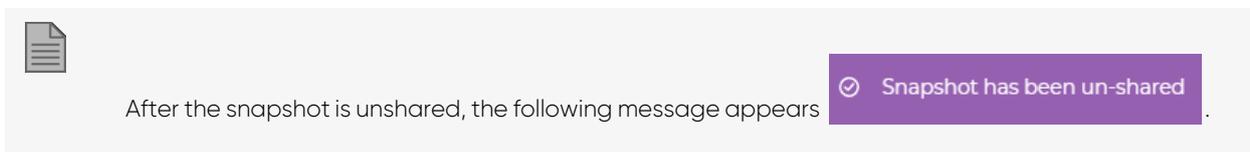
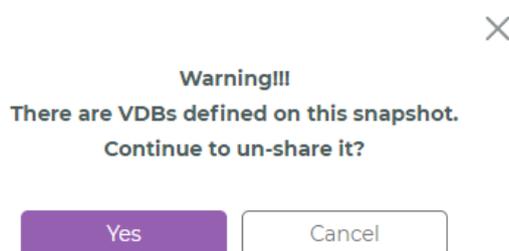
To unshare a snapshot:

1. Select the snapshot.

2. Click  Unshare.

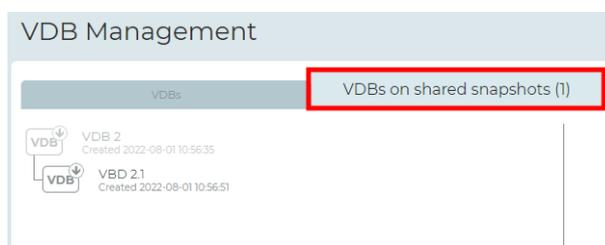


3. Click **Yes** to confirm unsharing the snapshot or **Cancel** to exit with unsharing the snapshot.



To see snapshots that are shared to you:

1. Click **VDBs on shared snapshots**.



8. Users Management



Only a user with **Admin** privileges can create or modify users and roles.



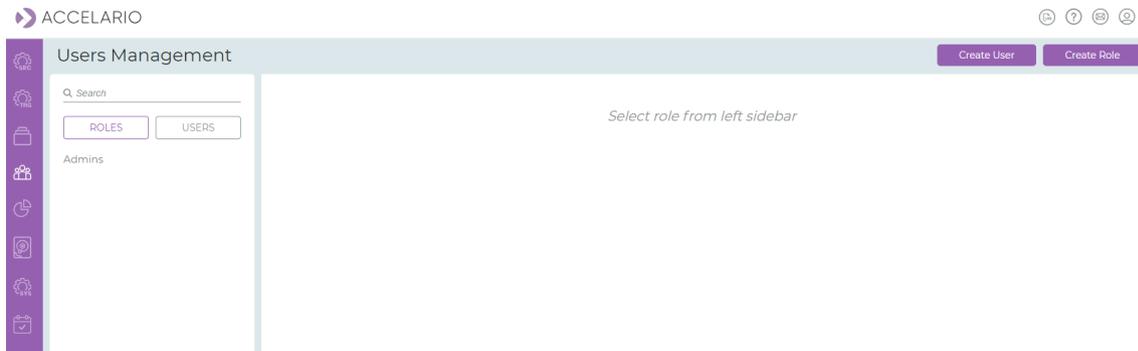
A default user **admin** with the role **Admins** exists when the system is first installed.

To manage users:

1. On the navigation bar, click  (Users Management).



The **Users Management** window appears.



You can quickly locate a user by typing a name in the **Search** bar. The list updates promptly.

Q Search



You can display the list based on **ROLES** or **USERS**.

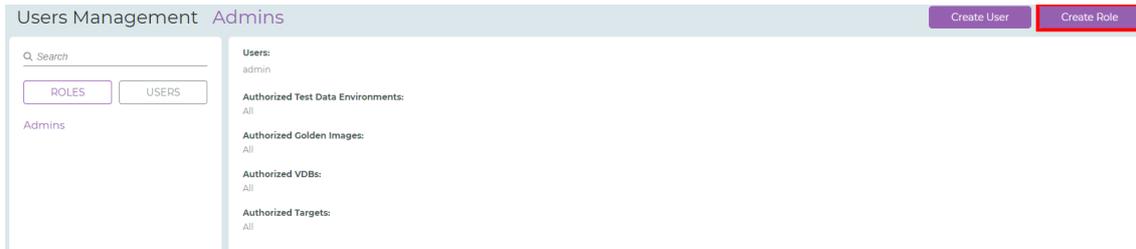
Q Search

ROLES

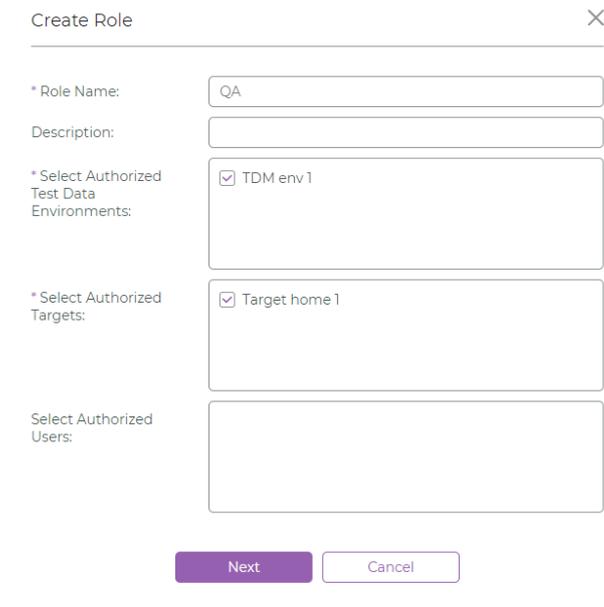
USERS

To create a new role:

1. Click **Create Role**.



2. Fill in the details.

A screenshot of the 'Create Role' dialog box. The dialog has a title bar with 'Create Role' and a close button. It contains several fields: 'Role Name' with the value 'QA', 'Description' (empty), '* Select Authorized Test Data Environments:' with a checked checkbox for 'TDM env 1', '* Select Authorized Targets:' with a checked checkbox for 'Target home 1', and 'Select Authorized Users:' (empty). At the bottom, there are two buttons: 'Next' and 'Cancel'.

3. Click **Next**.

4. Select the checkbox(es) for the GI and VDBs that the user is authorized to use.

Create Role

* Select authorized Golden Images/Volumes:

- All
- TDM env 1
 - rman1
 - VDB 1
 - VDB 1.1
 - VDB 2
 - VBD 2.1

Create Back Cancel

5. Click **Create**.



After the role is created, the following message appears

Role "QA" has been created

The **Users Management** window displays all the role(s) that have been created.

Users Management QA

Create User Create Role

Q Search

ROLES USERS

Admins

QA

Dev

Users

Q Quick Search

Name

No data is currently available

Authorized Test Data Environments

All

Q Quick Search

Test Data Environment	Golden Image	Test Data Environment Access
TDM env 1	rman1	No

Authorized Targets

Q Quick Search

Target Name
Target home 1

Authorized VDBs

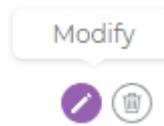
All

Q Quick Search

VDB	Golden Image	Test Data Environment
VDB 2	rman1	TDM env 1
VBD 2.1	rman1	TDM env 1

To edit role details:

1. On the required role, click  (Modify).



2. The **Modify Role** window appears. Modify the role details as required.

Modify Role ✕

* Role Name:

Description:

* Select Authorized Test Data Environments: TDM env1

* Select Authorized Targets: Target home 1

Select Authorized Users:

3. Click **Next**.

4. Complete the necessary changes to the role details.

Modify Role ✕

*Select authorized Golden Images/Volumes:

All

TDM env 1

rman1

- VDB 1
 - VDB 1.1
 - VDB 2
 - VDB 2.1

Modify Back Cancel

5. To save your changes, click **Modify**. Otherwise, click **Cancel**.

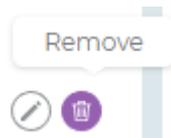


After the change is done, the following message appears

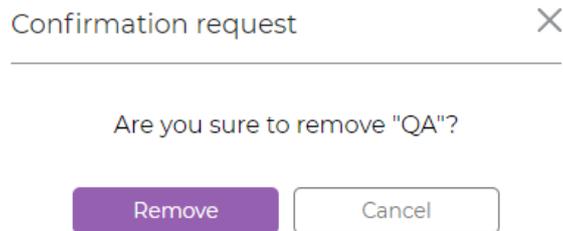
✔ Role "QA" has been modified

To remove a role:

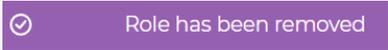
1. On the required role, click  (**Remove**).



2. Click **Remove** to confirm the deletion, or **Cancel** to exit without deleting the role.



After the role is removed, the following message appears



To add a new user:

1. Click **Create User**.



2. Fill in the details.

Create User ✕

* User Name:

Description:

* Select Roles:

- Dev
- QA
- Admin

* Authentication Type: Local Active Directory

* Password:

* Confirm Password:

* Email:

3. Click **Create**.

 After the user is created, the following message appears ✔ User "QA tester 1" has been created

Users Management QA tester 1 Create User Create Role

Q Search

ROLES USERS

admin

QA tester 1 🔍 🔍

Dev engineer 1 🔍 🔍

Roles

Q Quick Search

Role Name !

QA

Authorized Test Data Environments

All ▼ Q Quick Search

Test Data Environment !	Golden Image !	Golden Image Access !
TDM env 1	rman1	No

Authorized Targets

Q Quick Search

Target Name !

Target home 1

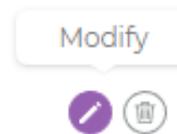
Authorized VDBs

All ▼ Q Quick Search

VDB !	Golden Image !	Test Data Environment !
VDB 2	rman1	TDM env 1
VDB 2.1	rman1	TDM env 1

To edit user details:

1. On the required user, click  (Modify).



2. The **Modify User** window appears. Modify the user details as required.

Modify User ✕

* User Name:

Description:

* Select Roles:

- Dev
- QA

Admin

* Authentication Type: Local Active Directory

* Password:

* Confirm Password:

* Email:

3. To save your changes, click **Modify**. Otherwise, click **Cancel**.

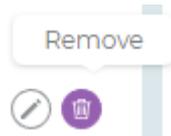


After the change is done, the following message appears

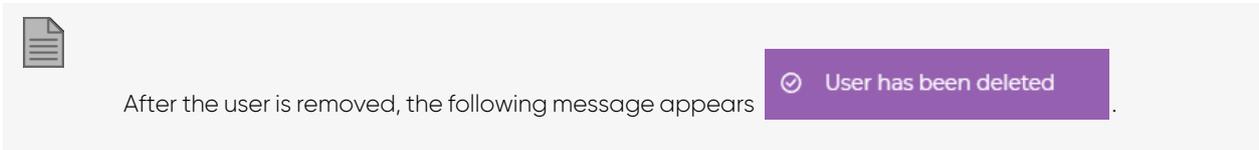
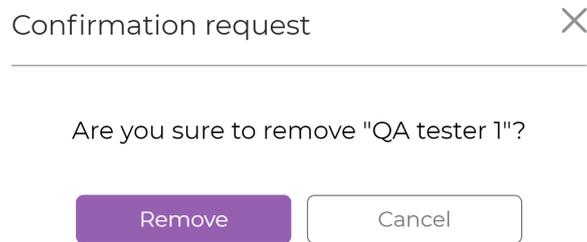
 User "QA tester 1" has been modified

To remove a user:

1. On the required user, click  (Remove).



2. Click **Remove** to confirm the deletion, or **Cancel** to exit without deleting the user.



9. Monitoring Datasets

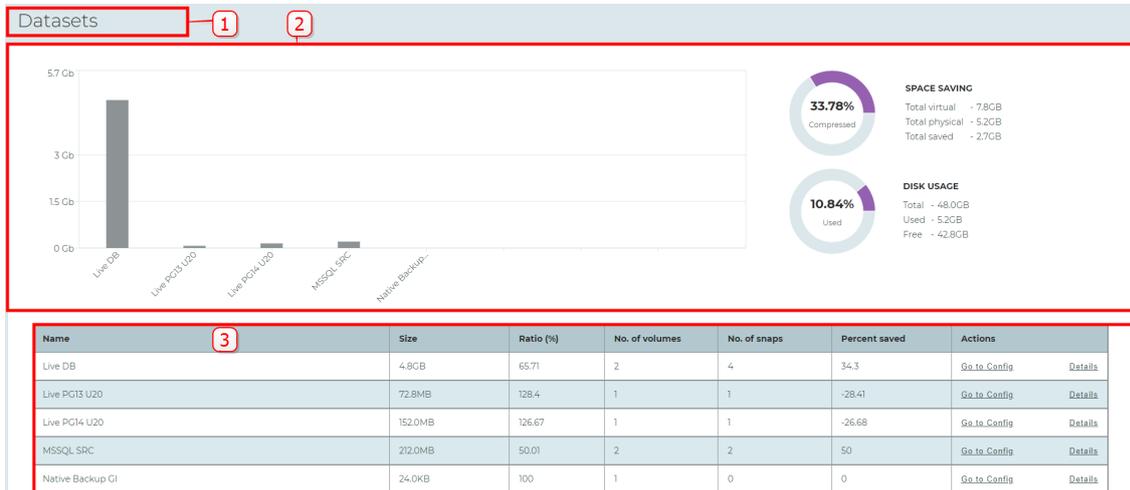
The **Datasets** work area shows the quantity of space saved and disk space used for each data environment. With just one click you can easily drill-down to see the details for an environment.

To open the Datasets work area:

1. On the navigation bar, click  (Datasets).



The following image and table describe the **Datasets** work area.



#	Item	Description
1	Type of Data Environment	Shows the data for a dataset, test environment, or database.
2	View Area	Shows the total quantity of space saved and disk usage for the selected data environment.
3	Details List	Shows the details for the selected data environment. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> The Percent saved is shown for each data environment. </div>

General details for a dataset:

General details are shown in the details list.

Name	Size	Ratio (%)	No. of volumes	No. of snaps	Percent saved	Actions
Live DB	2.0GB	84.41	3	5	15.6	Go to Config Details

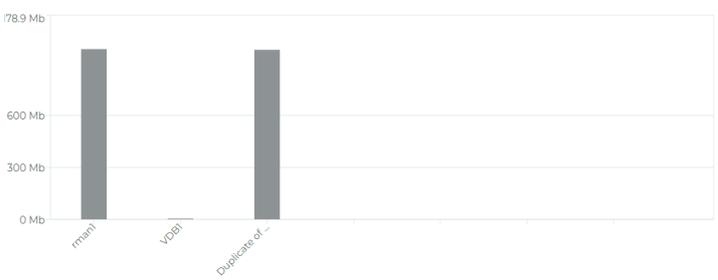
To see test data environment details:

1. Click **Details** in the row for a test data environment.

Actions

[Go to Config](#) [Details](#)

Datasets Environments



SPACE SAVING
33.04% Compressed
Total virtual - 2.9GB
Total physical - 2.0GB
Total saved - 993.1MB

Type	Name	Size	No. of snaps	Percent saved	Actions
GLRMAN	rman1	1006.0MB	3	-0.6	Go to Config Details
CLONE	VDB1	4.9MB	1	99.52	Go to Config Details
DUPLICATE	Duplicate of rman1	1002.0MB	1	0	Go to Config Details



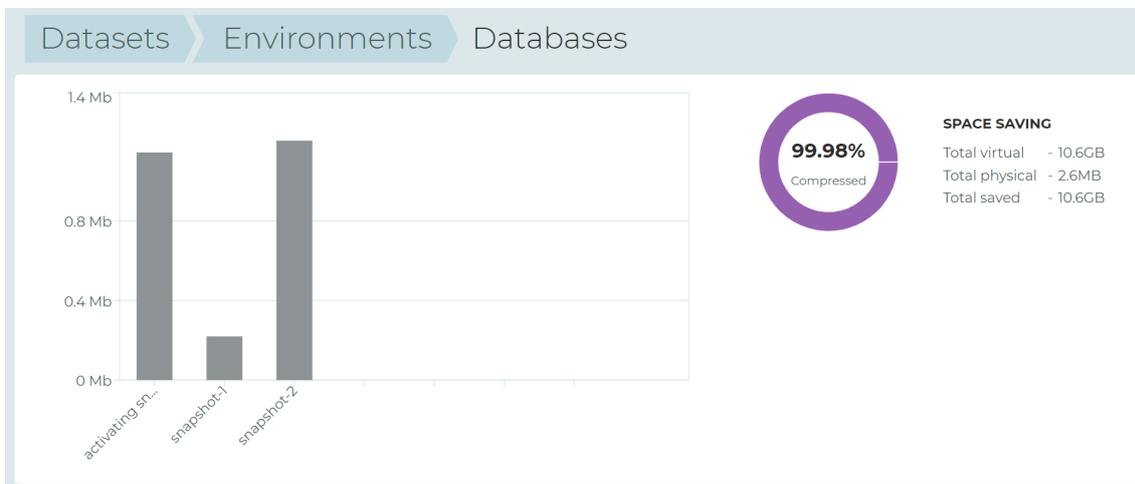
The quantity of space saved is shown for each golden image, duplicate golden image, and VDB.

To see database details:

1. Click **Details** in the row the required data environment.

Actions

[Go to Config](#) [Details](#)



Name	Created at	Size	Percent saved	Actions
activating snapshot	2022-09-13 09:23:07	1.2MB	9999.97	Go to Config
snapshot-1	2022-09-13 09:23:10	229.0KB	10000	Go to Config
snapshot-2	2022-09-13 09:23:13	1.2MB	9999.97	Go to Config



The quantity of space saved is shown for each snapshot.

To see VDB Management:

1. Click **Go to Config** in the row the required data environment.

Actions	
Go to Config	Details

10. Storage Pool Management

Storage pools store the golden images and duplicates. This section describes how to manage primary and secondary storage pools.

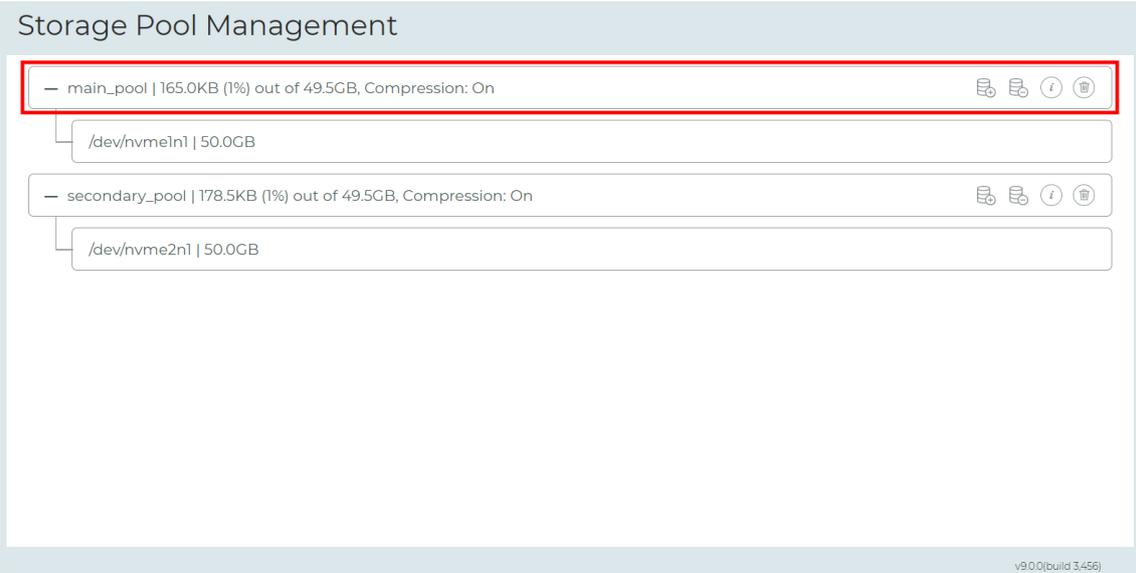
1. On the navigation bar, click  (Pool Management).



Primary Pool Management

To expand a primary storage pool:

1. Select a primary storage pool.



The screenshot displays the 'Storage Pool Management' interface. It features a list of storage pools. The first pool, 'main_pool', is highlighted with a red rectangular border. The text for 'main_pool' reads: 'main_pool | 165.0KB (1%) out of 49.5GB, Compression: On'. To the right of this text are four icons: a list icon, a refresh icon, an information icon, and a delete icon. Below the pool name, a sub-entry shows the path '/dev/nvme1n1 | 50.0GB'. The second pool, 'secondary_pool', is listed below and has similar details: 'secondary_pool | 178.5KB (1%) out of 49.5GB, Compression: On' and a sub-entry for '/dev/nvme2n1 | 50.0GB'. The interface also includes a version number 'v9.0.0(build 3456)' in the bottom right corner.

2. Click  (Expand Primary Storage Pool).
 - a. Select a disk

Expand Primary Storage Pool✕

Please select disk: **Total capacity:** 1GB

Name	Capacity
<input checked="" type="checkbox"/> /dev/nvme3n1	1.0GB

Disk path:

ExpandCancel

or

- b. Select disk path.

Expand Primary Storage Pool✕

Please select disk: **Total capacity:** 0 Bytes

Name	Capacity
<input type="checkbox"/> /dev/nvme3n1	1.0GB

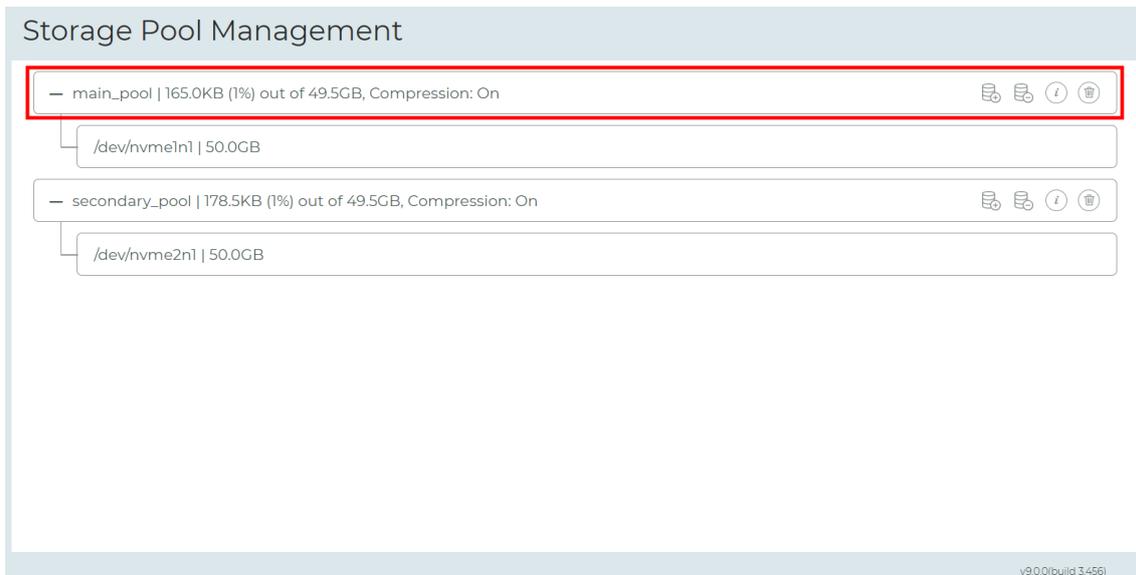
Disk path:

ExpandCancel

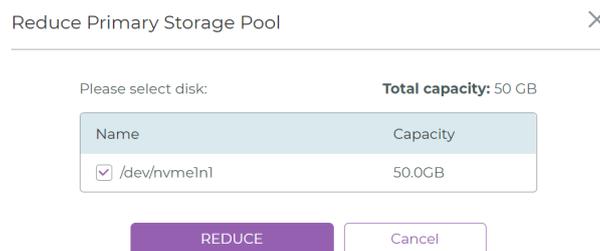
3. Click **Expand**.

To reduce a primary storage pool:

1. Select a primary storage pool.



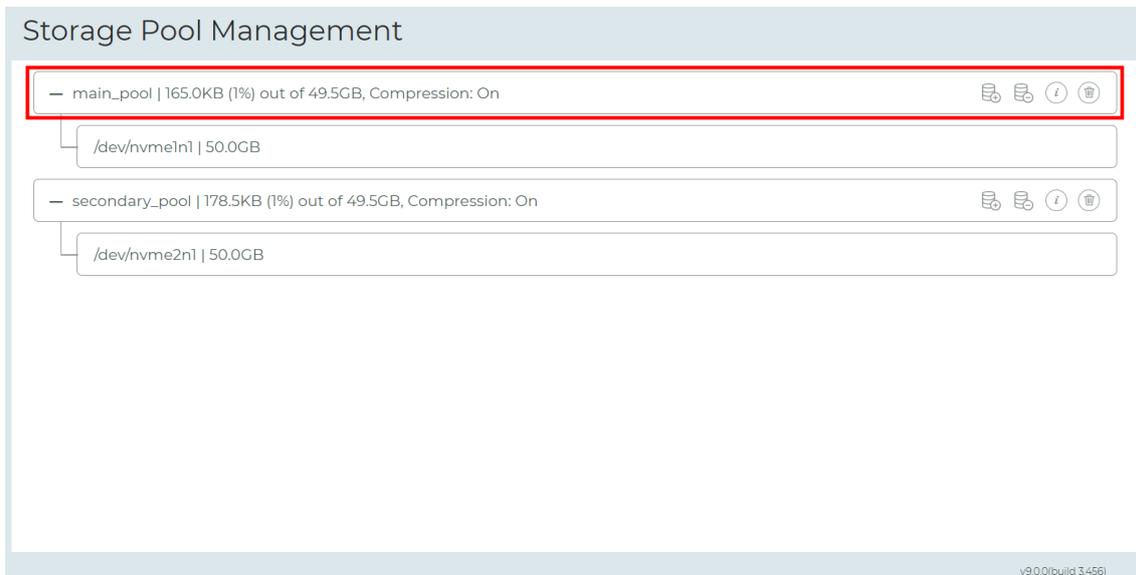
2. Click  (Reduce Primary Storage Pool).
3. Select a disk.



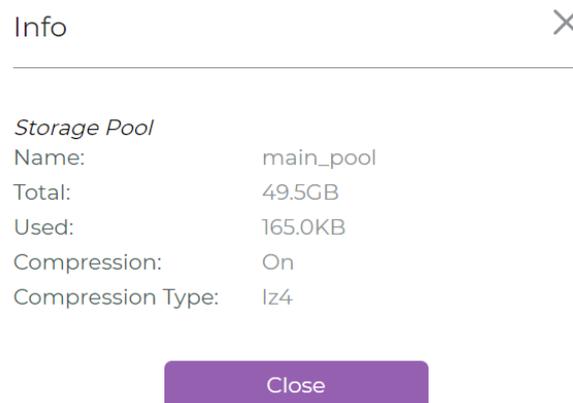
4. Click **Reduce**.

To see information about a primary storage pool:

1. Select a primary storage pool.



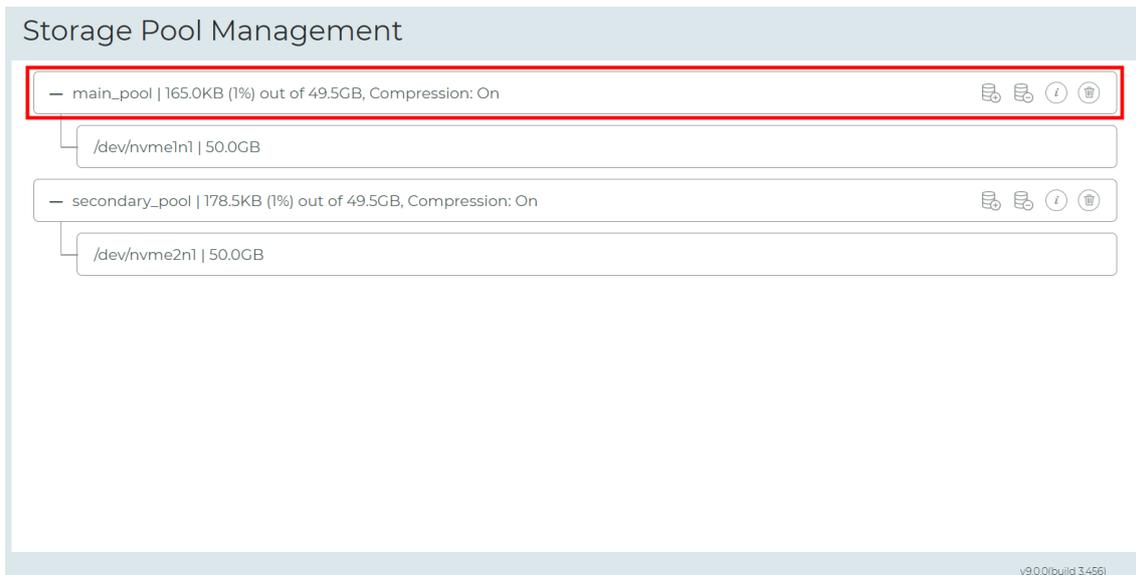
2. Click  (Pool info).



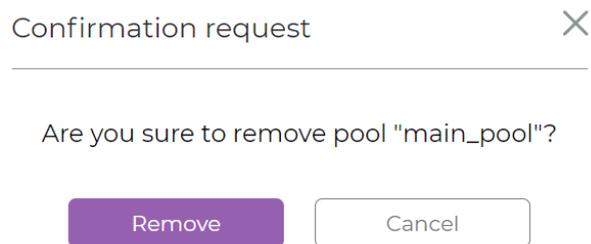
3. To return to the main **Pool Management** work area, click **Close**.

To remove a primary storage pool:

1. Select a primary storage pool.



2. Click  (Remove pool).



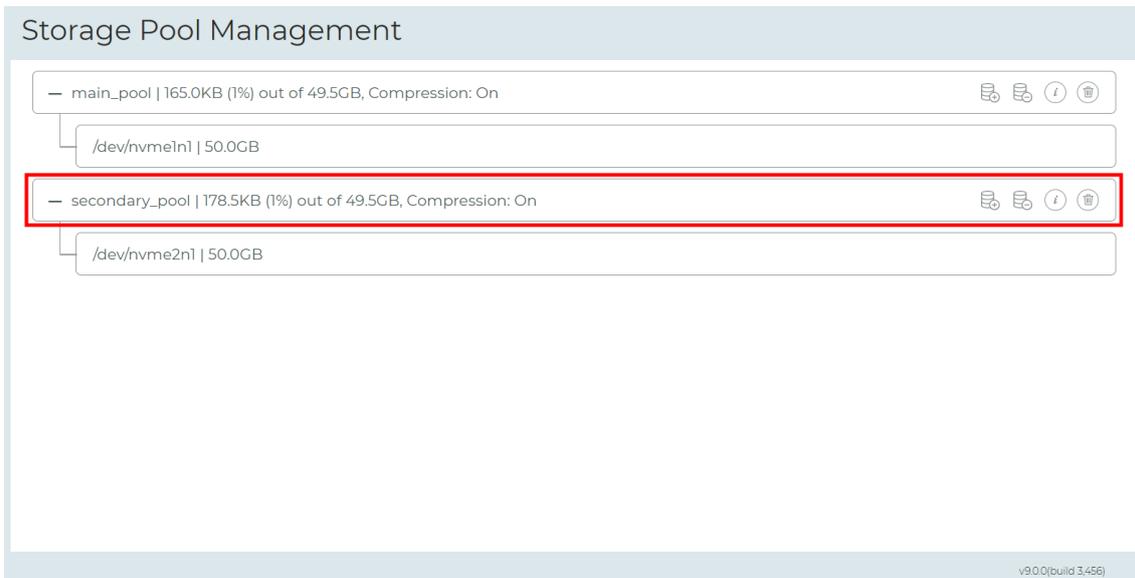
3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the primary pool.

Secondary Pool Management

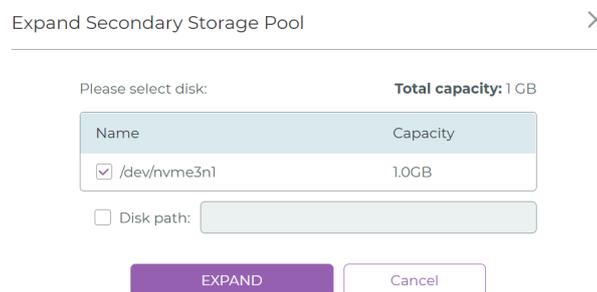
To create a secondary storage pool, see [To create a secondary storage pool](#).

To expand a secondary storage pool:

1. Select a secondary storage pool.



2. Click  (Expand Secondary Storage Pool).
 - a. Select a disk.



or

- b. Select disk path.

Expand Secondary Storage Pool ✕

Please select disk: Total capacity: 0 Bytes

Name	Capacity
<input type="checkbox"/> /dev/nvme3n1	1.0GB

Disk path:

Expand Cancel

- 3. Click **Expand**.

To reduce a secondary storage pool:

- 1. Select a secondary storage pool.

Storage Pool Management

- main_pool | 165.0KB (1%) out of 49.5GB, Compression: On 🔗 📄 ⓘ 🗑️
 - /dev/nvme1n1 | 50.0GB
- secondary_pool | 178.5KB (1%) out of 49.5GB, Compression: On 🔗 📄 ⓘ 🗑️
 - /dev/nvme2n1 | 50.0GB

v9.0.0(build 3.456)

2. Click  (Reduce Secondary Storage Pool).
3. Select a disk.

Reduce Secondary Storage Pool ×

Please select disk: **Total capacity:** 50 GB

Name	Capacity
<input checked="" type="checkbox"/> /dev/nvme2n1	50.0GB

REDUCE Cancel

4. Click **Reduce**.

To see information about a secondary storage pool:

1. Select a secondary storage pool.

Storage Pool Management

— main_pool | 165.0KB (1%) out of 49.5GB, Compression: On    

/dev/nvme1n1 | 50.0GB

— secondary_pool | 178.5KB (1%) out of 49.5GB, Compression: On    

/dev/nvme2n1 | 50.0GB

v9.0.0(build 3.456)

2. Click  (Pool info).

Info ✕

Storage Pool

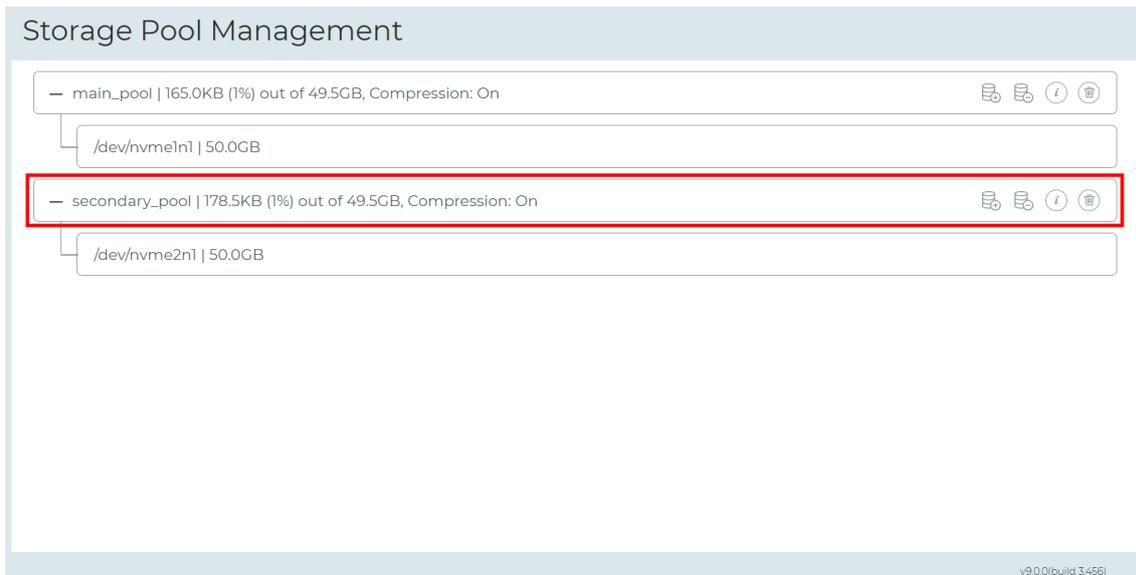
Name:	secondary_pool
Total:	49.5GB
Used:	178.5KB
Compression:	On
Compression Type:	lz4

[Close](#)

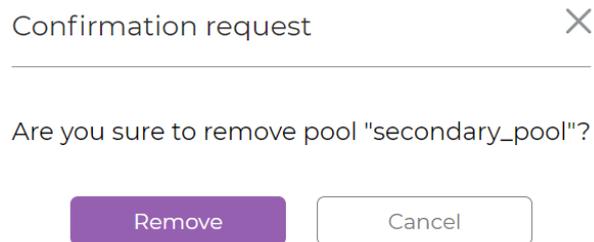
3. To return to the main **Pool Management** work area, click **Close**.

To remove a secondary storage pool:

1. Select a secondary storage pool.



2. Click  (Remove pool).



3. Click **Remove** to confirm the deletion or **Cancel** to exit without deleting the secondary pool.

11. System Setup

The **System Setup** is used to define system parameters, such as SMTP, Active Directory, etc.

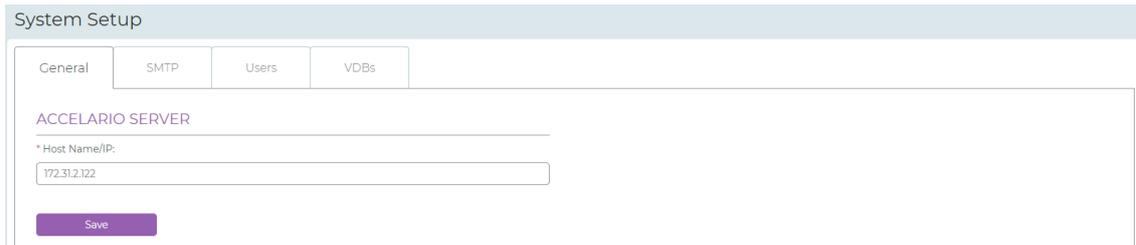
To setup the system:

1. On the navigation bar, click  (System Setup).



To configure the Accelario server:

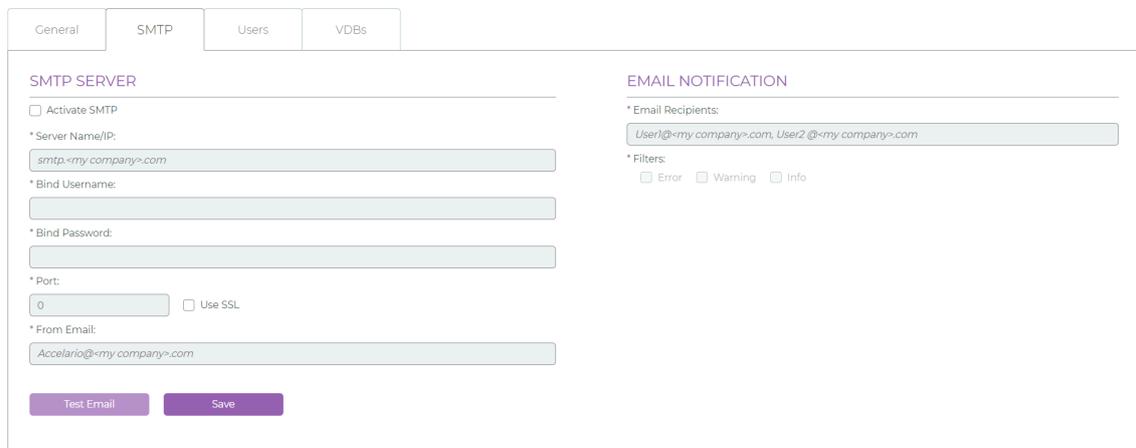
1. Click **General**.
2. Fill in the server IP.



The screenshot shows the 'System Setup' interface with the 'General' tab selected. The title is 'ACCELARIO SERVER'. There is a field for '* Host Name/IP:' containing the value '172.31.2.122'. A purple 'Save' button is located at the bottom left of the form area.

To setup the SMTP server:

1. Click **SMTP**.
2. Fill in the details to setup the SMTP server.



The screenshot shows the 'System Setup' interface with the 'SMTP' tab selected. The title is 'SMTP SERVER'. There is an unchecked checkbox for 'Activate SMTP'. The '* Server Name/IP:' field contains 'smtp.<my company>.com'. The '* Bind Username:' field is empty. The '* Bind Password:' field is empty. The '* Port:' field contains '0' and there is an unchecked checkbox for 'Use SSL'. The '* From Email:' field contains 'Accelario@<my company>.com'. At the bottom left are 'Test Email' and 'Save' buttons.

On the right side, the 'EMAIL NOTIFICATION' section has a title bar. Below it is the '* Email Recipients:' field containing 'User1@<my company>.com, User2 @<my company>.com'. Below that is the '* Filters:' section with three unchecked checkboxes: 'Error', 'Warning', and 'Info'.

3. Click **Test Email** to verify that the SMTP server settings are correct.
4. Click **Save**.

To setup the active directory:

1. Click **Users**.
2. Fill in the details to setup the active directory.

The screenshot shows a web interface with four tabs: 'General', 'SMTP', 'Users', and 'VDBs'. The 'Users' tab is selected. Below the tabs is a section titled 'ACTIVE DIRECTORY SETTING'. At the top of this section is a checkbox labeled 'Use Active Directory Authentication'. Below this are several input fields and a dropdown menu:

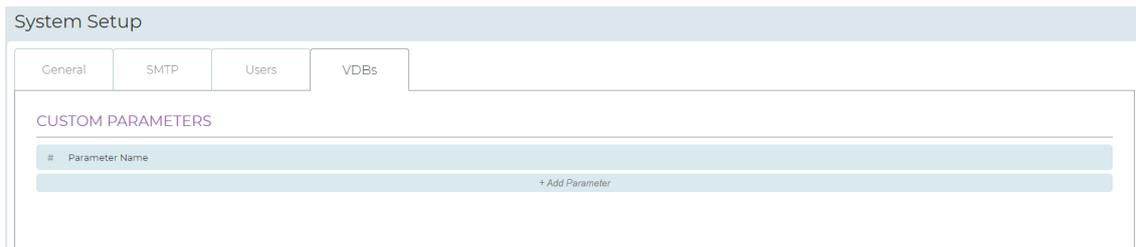
- * Server Name/IP: A text input field containing the placeholder text 'smtp.<my company>.com'.
- * Bind Username: A text input field.
- * Port: A text input field containing the value '0'.
- * Authentication Type: A dropdown menu with 'Simple' selected.
- * Bind Password: A text input field.
- * AD Domain Name: A text input field.

At the bottom of the 'ACTIVE DIRECTORY SETTING' section are two buttons: 'Test AD' and 'Save'.

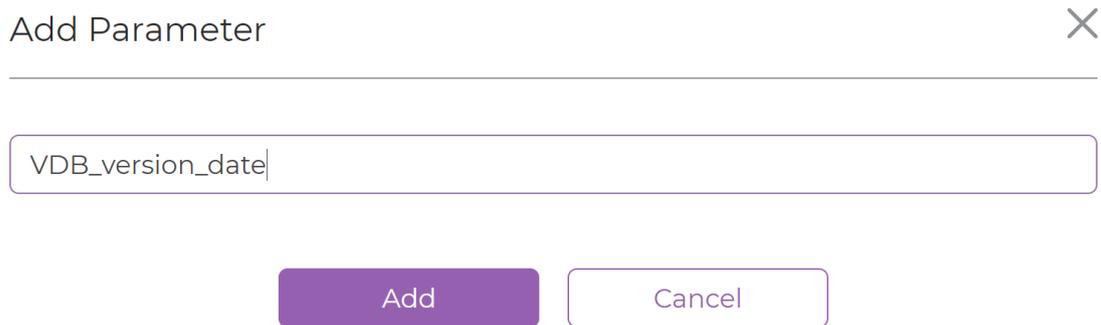
3. Click **Test AD** to verify that the active directory settings are correct.
4. Click **Save**.

To add an advanced parameter:

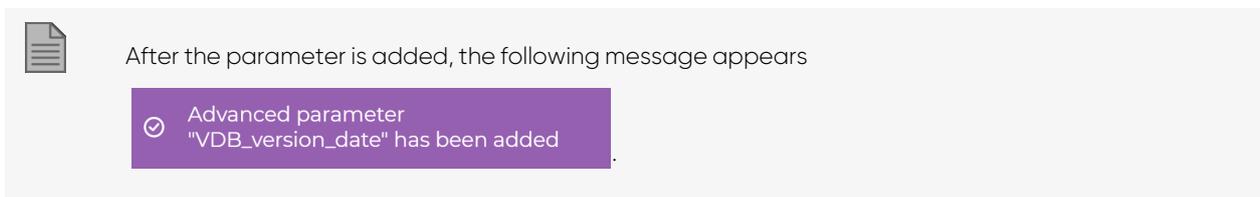
1. Click **VDBs**.
2. Click **Add Parameter**.



3. Enter parameter name.



4. Click **Add**.



To remove a custom parameter:

1. Select the parameter.
2. Click  .



After the parameter is deleted, the following message appears

 Advanced parameter
"VDB_version_date" has been deleted

12. Event Viewer

The **Event Viewer** is used to see, filter, and search user events. In the **Event Viewer** you can drill down and see details for events. You can: also save all user event to a file. This section describes how to do these tasks.

To open the Event Viewer work area:

1. On the navigation bar, click  (Event Viewer).



Event Viewer Download Events

Q Filter: None

PREDEFINED RANGE

Last 24 hours
Last week
Last month
Last 3 month

CUSTOM RANGE

From:

To:

Date	Message	Severity	Component	Actions	User	Status
Feb 22, 2022 11:39	The user role QA tester was successfully removed	INFO	Users	Remove Role	admin / Admins	COMPLETE
Feb 22, 2022 10:35	The user role QA tester was successfully created	INFO	Users	Create Role	admin / Admins	COMPLETE
Feb 22, 2022 10:25	The user Lead software tester was successfully created	INFO	Users	Create User	admin / Admins	COMPLETE
Feb 22, 2022 10:25	RMAN GI TDM env 1 was successfully created	INFO	RMAN GI	Create RMAN GI	admin / Admins	COMPLETE
Feb 22, 2022 10:21	Source host TDM env 1 was successfully created	INFO	Source Host	Add Source Host	admin / Admins	COMPLETE
Feb 22, 2022 10:20	Target Oracle home Target Home1 was successfully created	INFO	Target Oracle home	Add Oracle home	admin / Admins	COMPLETE
Feb 22, 2022 10:19	Target host Target Host 1 was successfully created	INFO	Target Host	Add Target Host	admin / Admins	COMPLETE

To filter events with a keyword:

1. Type a keyword in the **Filter** bar.



To filter events for a specified time period:

1. Select:
 - a. A PREDEFINED RANGE

PREDEFINED RANGE

Last 24 hours

Last week

Last month

Last 3 month

or

- b. Enter a CUSTOM RANGE.

CUSTOM RANGE

From:

To:

To sort events:

1. Select:
 - a. A column heading.
 - b. Select the sort order  .

Date 	Message 	Severity 	Component 	Actions 	User 	Status 
--	---	--	---	---	--	--

To download events:

1. Click [Download Events](#).
2. Select CSV or JSON.

