LDP Workshop

**Workshop 5**

**More on this workshop**

**Repairing out of sync condition**

**There may be times where you will experence a situation where the target tables are no longer in sync with the source tables. This is a condition called out of sync (OOS) and there are many reasons for this to occur. LDP gives you the ability to compare the source and target tables and then if the table is OOS, LDP repair will bring that target table back into sync with the source table.**

**In this lab you will create an OOS condition on the history table running on the Postgres database. This will be done by running a script on the VNC viewer webpage that will delete rows from the target postgres table. The using LDP compare and repair, you will first confirm the table is OOS and then using LDP repair, bring the table back into synchronization with the source.**

1. Go to the VNC viewer URL (port 8081). On the desktop there is a folder called “labs”

*Double Click* on the folder called labs located on the left side of the desktop. If HammerDB is still open, close it by clicking on the gray “x” on the top right of the window

Graphical user interface, application

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Graphical user interface, background pattern

Description automatically generated

This will open the labs folder. In there will be a script called delete\_history.sh.

Graphical user interface, text, application

Description automatically generated

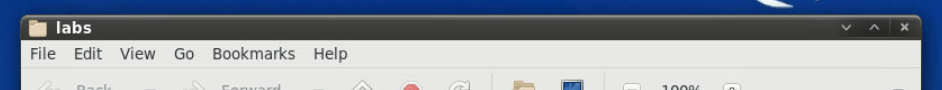
*Double click* the “delete\_history.sh”. this will bring up a window asking how you want to run the script.

*Click* the run button on the right to run the script

Table

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*Click* on the small “x” in the top right of the labs folder window to close it.



1. Confirm the Postgres history table is now OOS with the source Oracle history table by running a compare of the history table.

Make sure you are on the LDP webpage (port 8080), logged in as the “hubowner” and on the ora2mdbpg channel. If not navigate there from the channels icon on the top left of the navigation bar.

*Click* on the “Compare Data” button on the top right of the channels page

Graphical user interface, application, Teams

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This brings up the “Compare Data” window.

*Expand* the locations drop down and select only the postgres target by *clicking* on the “x” next to the mariadb location. This will remove it from the compare

Graphical user interface, application

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*Expand* the “Tables” drop down

*Uncheck* all tables except the “history” table and make sure that “Online Compare” is selected and that the first choice “Combine Initial Differences…” is selected

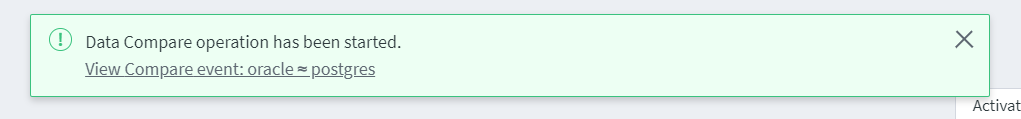
*Click* on the blue “Compare Data” button at the bottom of the window to start the compare

Graphical user interface, table

Description automatically generated

When the compare starts it will create an event that can be monitored

*Click* on the link presented in the green pop-up message box.



This will take you to the compare event that has just been started. Once the compare finishes the status of the history table will be shown. The State column will have a status of “DONE/DIFFERENT” and in the “ROWS ONLY ON SOURCE” column will be the number of missing/different rows between the two tables.

A screenshot of a computer

Description automatically generated with low confidence

1. Bring the Postgres target history table back in sync with the Oracle source history table.

*Click* on the channels icon in the navigation bar on the left side of the LDP page to get back to the ora2mdbpg channel.

A screenshot of a phone

Description automatically generated with low confidence

*Click* on the “Refresh Data” button on the top right of the channel page

Graphical user interface, text, application

Description automatically generated

This brings up the “Refresh Data into Target” window.

*Expand* the locations and click the “x” next to mariadb to remove it from the refresh

*Expand*  the tables drop down and make sure only the history table is selected.

*Confirm* that the “No Initial Creation or Alter of Tables” is check

*Check* the “Repair – Row by Row Granularity” button so it is selected

*Click* on the blue “Refresh Data” button at the bottom of the window to start the repair

Graphical user interface, application

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Graphical user interface, text, application, email

Description automatically generated

Just like with the compare, once you start the job a green widow will pop up letting you know the refresh has started.

*Click* on the link presented in the pop up view the status of the repair

Shape, rectangle

Description automatically generated

This will take you to the “Refresh” event where the status of the refresh can be viewed.

A screenshot of a computer

Description automatically generated with medium confidence

You can also view the log file of the refresh as well.

*Click* on the blue “View Log” link that is presented in the information line across the top of the Refresh page

A picture containing screenshot, text, software

Description automatically generated

This will bring up the log file where information on the repair can be viewed. To close the log file, *click* on the “X” on the right side of the log window.

Graphical user interface, text

Description automatically generated

1. To confirm the history table is again in sync, re-run the compare like you did earlier in this lab in step 2

*Navigate* to the channels page

*Click* on the “Compare Data” button on the top right of the page which will bring up the “Compare Data” window

*Expand* the locations drop down and remove mariadb from the target selection

*Expand* the table drop down and make sure only the history table is selected.

*Confirm* that the “Online Compare” is selected this time with the choice of “Do Compare Twice and Report Only Differences Which Occur Twice”” chosen.

*Confirm* the wait button is selected with a wait time if 5 seconds

*Click* on the blue “Compare Data” button on the lower right of the window

Graphical user interface, application

Description automatically generated

*Click* on the link presented in the green pop-up window to be taken to the compare event page and confirm the history table is indeed back in sync with the Oracle source.

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Description automatically generated with low confidence

**Conclusion**

In this workshop, you learned that there are times that target tables may become out-of-sync with the source tables. LDP gives you the ability to check to confirm tables are out-of-sync and if an out-of-sync is found, LDP provides an easy way to repair the target table to bring it back in sync with the source table.

**Congratulations!**

Reading this implies that you walked through the steps to set up data replication between three systems, running different database technologies, from scratch. You learned how to configure data replication using LDP, inspected the topology chart that resulted from your setup, and looked at the statistics for the ongoing replication. If there are issues with the replication, then you know LDP can proactively send out notifications.

You also refreshed a table and validated that the table in the databases are truly in sync and saw that along the way, LDP diligently kept an audit log of the operations you performed as you were making changes to the setup and implemented data replication.

In addition, you learned how to repair a target table if it becomes out-of-sync with the source

You may now show what you achieved in these workshops to your co-workers or explore around with this setup for the remaining allocated time that this trial is available to you.