Add PostgreSQL support to KMS (LAS-19038)

⌐ [LAS-23508] Add PostgreSQL support to KMS backend Created: 24/May/23 Updated: 11/Sep/25

Status:	In Dev
Project:	Lighthouse Agile Scrum
Components:	Core
Affects versions:	None
Fix versions:	25.9.0
Parent:	Add PostgreSQL support to KMS

Type:	Story	**Priority:**	Medium
Reporter:	Roman Petrov	**Assignee:**	Ilia Kryukov
Resolution:	Unresolved	**Votes:**	0
Labels:	LAS-19038, LAS-23508, RM_Locked		
Remaining Estimate:	10 weeks, 2 days		
Time Spent:	2 days		
Original estimate:	10 weeks, 4 days		

Attachments: 🖼 Screenshot 2025-04-01 at 14.23.42.png

Issue links:

Before/After

has to be done before	LAS-55975	Check and create all the indexes need...	Draft

Blocks

is blocked by	OPS-740	[PostgreSQL] An item title containing...	In Progress
is blocked by	LAS-58158	Add PostgreSQL support for unit tests...	Closed
is blocked by	LAS-56572	[PostgreSQL] An item title containing...	In Dev

Customer issue

From Customer	LAS-55965	TE Enable Postgre Sql LAS-52385	In QA

Defect

created	LAS-55969	[PostgreSQL] Error encountered while ...	Closed
created	LAS-55970	[PostgreSQL] Error encountered while ...	Closed

Hierarchy [Gantt]

is parent of	LAS-47660	[PostgreSQL] [BE] Add postgresql liqui...	Closed
is parent of	LAS-52347	[PostgreSQL] [BE] Fix postgresql liqui...	Closed
is parent of	LAS-52366	[PostgreSQL] [BE] Fix native KMS SQL q...	Closed
is parent of	LAS-52367	[PostgreSQL] [BE] Add PostgreSQL suppo...	Closed
is parent of	LAS-52382	[PostgreSQL] [BE] Make database switch...	Closed
is parent of	LAS-52383	[PostgreSQL] [BE] Make cloud scheduler...	Closed
is parent of	LAS-52385	[PostgreSQL] [BE] Fix kms-backend to s...	Closed
is parent of	LAS-52473	[PostgreSQL] [BE] Fix postgresql liqui...	Closed
is parent of	LAS-55325	[PostgreSQL] [BE] Add PostgreSQL suppo...	Closed
is parent of	LAS-55326	[PostgreSQL] [BE] Add PostgreSQL suppo...	Closed
is parent of	LAS-55327	[PostgreSQL] [BE] Add PostgreSQL suppo...	Closed
is parent of	LAS-55328	[PostgreSQL] [BE] Add PostgreSQL suppo...	Closed
is parent of	LAS-55477	[PostgreSQL] [BE] rebase story branch ...	Closed

is parent of	OPS-389	[Gitlab-CI] Add PostgreSQL test run i...	To Do
is parent of	LAS-52388	[PostgreSQL] [BE] Create migration too...	Ready for QA
is parent of	LAS-58547	[PostgreSQL] [BE] bugfix placeholder	Draft
is parent of	LAS-58774	[PostgreSQL] [BE] bugfix placeholder	Draft
is parent of	LAS-52503	[PostgreSQL] [BE] Add PostgreSQL suppo...	In Dev
is parent of	LAS-58154	[PostgreSQL] [BE] rebase story branch ...	QA Blocked
is parent of	LAS-58536	[PostgreSQL] [BE] Fix KMS start and mi...	Dev Testing

Relates

relates to	OPS-260	Enable PostgreSQL Support for KMS App...	Done

Test

is tested by	LAS-55967	[PostgreSQL] Search doesn't work (ind...	Closed
is tested by	LAS-55968	[PostgreSQL] Search doesn't work	Closed
is tested by	LAS-55969	[PostgreSQL] Error encountered while ...	Closed
is tested by	LAS-56563	[PostgreSQL] Incorrect order of the i...	Closed
is tested by	LAS-57834	[PostgreSQL] Db changes in monitoring...	Closed
is tested by	LAS-56941	[PostgreSQL] The Settings	Closed

		page curren...	
is tested by	~~LAS-56942~~	[PostgreSQL] Impossible upload mp4 file	Closed
is tested by	~~LAS-57163~~	[PostgreSQL] DB Errors when starting ...	Closed
is tested by	~~LAS-56508~~	[PostgreSQL] Incorrect order of the e...	Closed
is tested by	LAS-56405	[Add PostgreSQL support to KMS backen...	Done
is tested by	LAS-56404	[Add PostgreSQL support to KMS backen...	In QA
is tested by	LAS-56403	[Add PostgreSQL support to KMS backen...	Draft
is tested by	LAS-56572	[PostgreSQL] An item title containing...	In Dev
is tested by	LAS-56553	[PostgreSQL] Impossible to create a ...	Dev Testing

Sprint:
Epic Link: [Add PostgreSQL support to KMS](#)
Code Reviewer: Alexey Udalykh
QA: Feodor Beresnyov
QA Estimation: Days - 5
Squad: Charoite
Product Manager: Roman Petrov
Merge Request Link: Story private branch → into dev:

~~https://kmsgit.lighthouse-cloud.com/kms/kms-trunk// merge_requests/11996-~~

~~https://kmsgit.lighthouse-cloud.com/kms/kms-trunk/-/ merge_requests/12639~~

Affected Layer: BE
Dev Notes: **Story private branch**:

~~https://kmsgit.lighthouse-cloud.com/kms/kms-trunk//tree/~~

	LAS-23508-Add-PostgreSQL-support- https://kmsgit.lighthouse-cloud.com/kms/kms-trunk/-/tree/LAS-23508-Add-PostgreSQL-support-alexey
HL BE Estimations:	XL - (over 40 days)
HL FE Estimations:	0 days
Release Commitment:	Yes
RM Planned:	Yes

Description

Multilanguage support was added only for MySQL databases in 7.6 MR3 and PostgreSQL support in KMS was suspended. For VTB customer we need to fix PostgreSQL support. Also, we plan to migrate all our environments from MySQL to PostgreSQL because of MySQL technical limitations. The migration itself is not in story scope but all migration tools should be created and tested.

Steps:

- Fix native KMS SQL queries to support PostgreSQL
- Add PostgreSQL support to https://kmsgit.lighthouse-cloud.com/kms/vanilla-db repository
- Make database switch easier using default KMS profiles
- Make cloud scheduler setup easier using default KMS profiles
- Fix KMS start from vanilla on PostgreSQL dump from https://kmsgit.lighthouse-cloud.com/kms/vanilla-db repository
- Create migration tool from MySQL to PostgreSQL and test it with big existing production dumps (see related task: https://kms-lighthouse.atlassian.net/browse/LAS-7104)

Acceptance criteria:

- A new KMS PostgreSQL dump is created in https://kmsgit.lighthouse-cloud.com/kms/vanilla-db repository on each push to dev branch in https://kmsgit.lighthouse-cloud.com/kms/kms-trunk or https://kmsgit.lighthouse-cloud.com/kms/item-uploader repository
- KMS database vanilla instance coud be easily created with docker images. The server image could start PostgreSQL with KMS dump inside. The client image could push KMS dump into external PostgreSQL instance.
- QA automation tests passed with PostgreSQL configuration
- Regression tests passed successfully on QA environment
- Regressions tests passed after MySQL->PostgreSQL migration for a big customer
- When story is done we need to create additional story to remove MySQL, Oracle, and MSSQL support from KMS

Comments

Comment by Anna Yehezkel [06/Mar/25]
Removing Fixversion to backlog, This story was not rquested to be approved and curently is not part of the approved scope.
this should be planned according to scoping approval of the release planning.
Lev Garkavy Nikolay Ivannikov Roman Petrov if this is required, please advise on target release and approach me for proper approvals.

Comment by [Ilia Kryukov](#) [31/Mar/25]
[Anna Yehezkel](#) , not 8.0, more likely it will be in 8.1\8.2

Comment by [Anna Yehezkel](#) [31/Mar/25]
10 BE MD is planned to be invested during 8.0 timeline

Comment by [Aleksei Ermakov](#) [01/Apr/25]
[Roman Petrov](#) [Bulat Bilalov](#) You can use add 'dbType' property in local.properties in tests with value
`postgres`' to execute all the tests with Postgres test container.
Probably it will be needed to replace the dump.
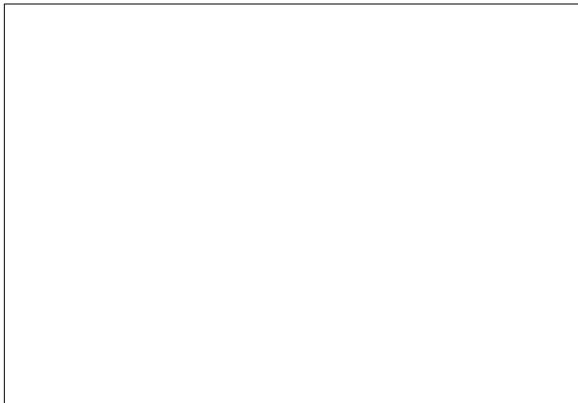
Comment by [Roman Petrov](#) [15/Apr/25]
[Ilia Kryukov](#) [Bulat Bilalov](#) I suggest the following order for the remaining tasks:

https://kms-lighthouse.atlassian.net/browse/LAS-52503

https://kms-lighthouse.atlassian.net/browse/DOK-455

https://kms-lighthouse.atlassian.net/browse/LAS-52367

https://kms-lighthouse.atlassian.net/browse/LAS-52366

https://kms-lighthouse.atlassian.net/browse/LAS-52388

Comment by [Anna Yehezkel](#) [22/May/25]
Moving to Backlog as part of Jira reset cleaning.

Comment by [Ilia Kryukov](#) [25/May/25]
[Anna Yehezkel](#) , [Nikolay Ivannikov](#) , its not in backlog, its in progress for a few upcoming releases.

Comment by [Anna Yehezkel](#) [27/May/25]
[Ilia Kryukov](#) [Nikolay Ivannikov](#) this should be planned as 5% of each release split allocation - please work
with [Petar Miljkovic](#) to include relevant tasks that fit this capacity split

Comment by [Nikolay Ivannikov](#) [27/May/25]
[Anna Yehezkel](#) it's not tech debt, it's requirement from business and future tech needs

Comment by [Anna Yehezkel](#) [27/May/25]
In that case [Sapir Zalach](#) , [Shira Shanny](#) please guide us on priorities

Petar Miljkovic , Amir Benyamini

Comment by Sapir Zalach [28/May/25]
Anna Yehezkel , I'm not familiar with this ticket, so if it's important, I'd like to suggest setting up a meeting to discuss it and assess whether we can include it in one of the upcoming versions. **At the moment, version 7.13 is already full.**

CC Nikolay Ivannikov Ilia Kryukov Roman Petrov

Comment by Ilia Kryukov [28/May/25]
Sapir Zalach , Anna Yehezkel , we are currently working on this story, see tasks in "In Dev" status.

Comment by Sapir Zalach [29/May/25]
Ilia Kryukov , How much development time is left?

Comment by Anna Yehezkel [03/Jun/25]
Hi All,

this is not approved neither for 7.12 nor for 7.13

Please stop the work immideately and plan it accordingly for the future releases.

our focus as of today 7.11.3 and 7.12 commitments.

Plese move all unresolved linked tasks to backlog and update their status back to dev.

Petar Miljkovic , Ilia Kryukov , Sapir Zalach

Comment by Anna Yehezkel [10/Jun/25]
Roman Chernis and Nir Ovshenko Rina Kvetney
Kfir Zuckerman and Nikolay Ivannikov requested this to add to 7.13 - can we please review and advise if possible (we also have 5% techdebt unalocated)

Comment by Ilia Kryukov [10/Jun/25]
Anna Yehezkel , the main part of the development already finished by Charoite.

Comment by Ilia Kryukov [10/Jun/25]
Anna Yehezkel , I'm talking about context switch.

You stopped this story a few days ago, moved it to backlog,

and now you moving this story with partially finished tasks (not finalized, without merge requests, etc) to another team ?

Are you sure?

I understand the "capacity issue", but it better to add/move some of the capacity from other squads instead of completely move partially finished story.

Emerald team have to start unfinished tasks from the scratch, its time wasting.

Nikolay Ivannikov , FYI

Comment by Anna Yehezkel [10/Jun/25]
Ilia Kryukov we should work only on oficially approve scope to avoid such.

curently I am not yet moving anything, I am asking another team to review and and advise on their plan to deliver it only then we can see if the plan is approved or not.
thank you

Comment by Roman Chernis [10/Jun/25]
In terms on BE I should
1. count how much BE capacity we have

2, sit with Roman Petrov to understand what is the remaining estimation for this story

but in terms of QA no chance we have capacity in Emerald like I described in separate email.

Comment by Anna Yehezkel [10/Jun/25]
final desision it is going back to charoite Ilia Kryukov

cc: Roman Chernis , Rina Kvetney

Comment by Sapir Zalach [11/Jun/25]
Ilia Kryukov ?

Comment by Anna Yehezkel [08/Jul/25]
Ilia Kryukov and Petar Miljkovic agreed with Kfir and Nik to postpone to 7.14. Thank you
cc: Sapir Zalach and Amir Benyamini , Shira Shanny - this is going to delay article score stories

Comment by Anna Yehezkel [12/Aug/25]
7.14.1 Released and 7.14.1 is canceled, therefore moved to 25.8

Comment by Anna Yehezkel [01/Sep/25]
25.8 Release is closed,
Moving this to 25.9

Comment by Anna Yehezkel [01/Sep/25]
25.8 Release is closed,
Moving this to 25.9