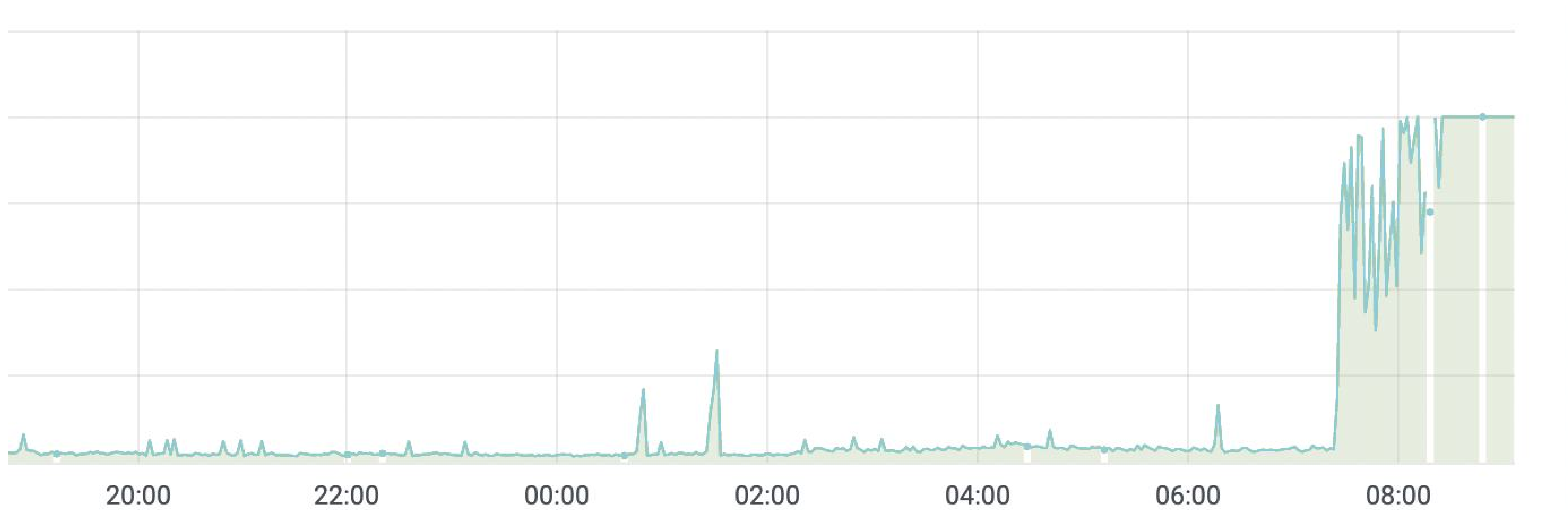




lars 11:52 AM

@devs, the site is down



```
SELECT * FROM pg_stat_statements
```

```
ORDER BY total_exec_time DESC
```

```
;
```

```

1 SELECT * FROM pg_stat_statements
2 ORDER BY total_exec_time DESC
3 ;

```

Query History

userid	dbid	toplevel	queryid	query	total_exec_time	plans	total_plan_time
553122	16773	TRUE	-58786373637288691	SELECT SUM("amount") FROM (SELECT "pu...	907042960.3950213	0	0
553122	16773	TRUE	5815299242699188919	SELECT SUM("amount") FROM (SELECT "pu...	73444300.05616744	0	0
553122	16773	TRUE	4824551964525231423	SELECT "public"."Quest"."id", "public"."Ques...	69170886.54973474	0	0
553122	16773	TRUE	8098147934708354534	SELECT COUNT(*) FROM (SELECT "public"."...	62568742.99561721	0	0
553122	16773	TRUE	6003439262406524531	SELECT "public"."Quest"."id" FROM "public"...	31842209.27137314	0	0
553122	16773	TRUE	-5114540640471270467	SELECT "public"."CubeMint"."id", "public"."C...	18933630.82254627	0	0
553122	16773	TRUE	-6034050072855875949	SELECT "public"."CubeMint"."id", "public"."C...	11985352.589723295	0	0
553122	16773	TRUE	7721167963650719401	SELECT SUM("public"."XpActivity"."xp"), "pu...	7813084.501182835	0	0
553122	16773	TRUE	1349180274528890393	SELECT "public"."QuestStepCompletion"."id"...	7481784.186058071	0	0
553122	16773	TRUE	1023892914617776314	SELECT g.id as "guildId", COUNT(cm.id)::int...	6323231.28703	0	0
553122	16773	TRUE	6278737103927557207	SELECT SUM("xp") FROM (SELECT "public"...	5434029.127677	0	0
553122	16773	TRUE	2135350881347221410	SELECT "public"."UserJourneyStampClaim"."...	3433090.828913972	0	0
553122	16773	TRUE	3670054500522086914	SELECT "public"."Quest"."id", "public"."Ques...	2125611.8938490003	0	0
553122	16773	TRUE	1089790238002995453	SELECT "public"."XpActivity"."id", "public"."X...	1788253.820441991	0	0
553122	16773	TRUE	-3562419331508907551	SELECT "public"."QuestCompletion"."id", "pu...	1755329.9063800059	0	0

```
SELECT "public"."CubeMint"."id", "public"."CubeMint"."cubeReceiptId",  
"public"."CubeMint"."txHash", "public"."CubeMint"."chainType",  
"public"."CubeMint"."chainId", "public"."CubeMint"."tokenId",  
"public"."CubeMint"."solanaTokenAddress", "public"."CubeMint"."isFinal",  
"public"."CubeMint"."feeCurrency", "public"."CubeMint"."feeAmount",  
"public"."CubeMint"."formattedFeeAmount", "public"."CubeMint"."minedAt",  
"public"."CubeMint"."createdAt", "public"."CubeMint"."updatedAt" FROM "public"."CubeMint"  
WHERE ("public"."CubeMint"."id") IN (SELECT "t0"."id" FROM "public"."CubeMint" AS "t0" INNER  
JOIN "public"."CubeReceipt" AS "j0" ON ("j0"."id") = ("t0"."cubeReceiptId") WHERE  
("j0"."userId" = $1 AND "t0"."id" IS NOT NULL)) ORDER BY "public"."CubeMint"."minedAt" DESC  
OFFSET $2
```

```
prisma.CubeMint.findMany( ... )
```

```
prisma.CubeMint.findFirst( ... )
```

```
prisma.User.findUnique(  
  {include: "CubeMint"}  
)
```

SEARCH AT THE
BACK!



WHERE'S WALLY?





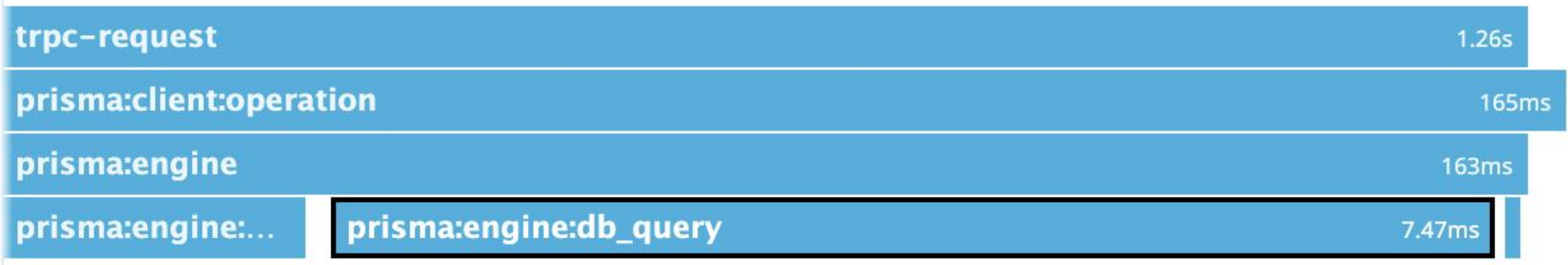
SEARCH AT THE
BACK!



WHERE'S

```
SELECT "public"."CubeMint"."id", "public"."CubeMint"."cubeReceiptId",
"public"."CubeMint"."txHash", "public"."CubeMint"."chainType",
"public"."CubeMint"."chainId", "public"."CubeMint"."tokenId",
"public"."CubeMint"."solanaTokenAddress", "public"."CubeMint"."isFinal",
"public"."CubeMint"."feeCurrency", "public"."CubeMint"."feeAmount",
"public"."CubeMint"."formattedFeeAmount", "public"."CubeMint"."minedAt",
"public"."CubeMint"."createdAt", "public"."CubeMint"."updatedAt" FROM "public"."CubeMint"
WHERE ("public"."CubeMint"."id") IN (SELECT "t0"."id" FROM "public"."CubeMint" AS "t0" INNER
JOIN "public"."CubeReceipt" AS "j0" ON ("j0"."id") = ("t0"."cubeReceiptId") WHERE
("j0"."userId" = $1 AND "t0"."id" IS NOT NULL)) ORDER BY "public"."CubeMint"."minedAt" DESC
OFFSET $2
```

layer3-app 100%



layer3-app prisma.internal prisma:engine:db_query

7.47ms 0.48% total exec time

Span: Overview Infrastructure Metrics Logs 0 Network Processes Profiles

```
SELECT "public"."Token"."id", "public"."Token"."name", "public"."Token"."iconCid", "public"."Token"."iconMetadata",  
"public"."Token"."symbol", "public"."Token"."address", "public"."Token"."decimals", "public"."Token"."usdPrice",  
"public"."Token"."chainId" FROM "public"."Token" WHERE "public"."Token"."id" IN ($1) OFFSET $2
```

pg_stat_statements

+

OpenTelemetry

1. Query pg_stat_statements

2. Find correlated traces

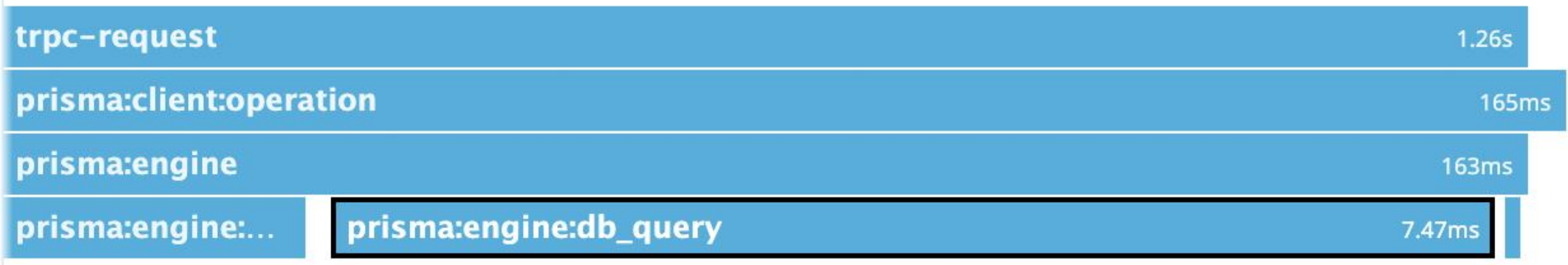
3. Show in a table

Query	Mean	Total duration	Calls
> SELECT SUM("amoun...	308.4ms	901008863s (73.45%)	2921326 (115 calls/min)
> SELECT SUM("amoun...	52.1ms	72946360s (5.95%)	1399317 (58 calls/min)
> SELECT "public"."...	8952.9ms	68498810s (5.58%)	7651 (19 calls/min)
> SELECT COUNT(*) F...	44.4ms	62151273s (5.07%)	1399317 (58 calls/min)
> SELECT "public"."...	632.6ms	31600375s (2.58%)	49957 (38 calls/min)
> SELECT "public"."...	73.8ms	18773913s (1.53%)	254279 (134 calls/min)
> SELECT "public"."...	45.2ms	11887852s (0.97%)	263133 (173 calls/min)
> SELECT SUM("publi...	19.1ms	7757134s (0.63%)	407166 (355 calls/min)
> SELECT "public"."...	174.5ms	7422214s (0.61%)	42543 (19 calls/min)
> SELECT g.id as "g...	11339.4ms	6293383s (0.51%)	555 (0 calls/min)

Query	Mean	Total duration	Calls
> SELECT SUM("amoun...	308.4ms	901008863s (73.45%)	2921326 (115 calls/min)
> SELECT SUM("amoun...	52.1ms	72946360s (5.95%)	1399317 (58 calls/min)
> SELECT "public"."...	8952.9ms	68498810s (5.58%)	7651 (19 calls/min)
> SELECT COUNT(*) F...	44.4ms	62151273s (5.07%)	1399317 (58 calls/min)
> SELECT "public"."...	632.6ms	31600375s (2.58%)	49957 (38 calls/min)
✓ SELECT "public"."...	73.8ms	18773913s (1.53%)	254279 (134 calls/min)

```
SELECT "public"."CubeMint"."id", "public"."CubeMint"."cubeReceiptId",
"public"."CubeMint"."txHash", "public"."CubeMint"."chainType",
"public"."CubeMint"."chainId", "public"."CubeMint"."tokenId",
"public"."CubeMint"."solanaTokenAddress", "public"."CubeMint"."isFinal",
"public"."CubeMint"."feeCurrency", "public"."CubeMint"."feeAmount",
"public"."CubeMint"."formattedFeeAmount", "public"."CubeMint"."minedAt",
"public"."CubeMint"."createdAt", "public"."CubeMint"."updatedAt" FROM "public"."CubeMint"
WHERE ("public"."CubeMint"."id") IN (SELECT "t0"."id" FROM "public"."CubeMint" AS "t0"
JOIN "public"."CubeReceipt" AS "j0" ON ("j0"."id") = ("t0"."cubeReceiptId") WHERE
("j0"."userId" = $1 AND "t0"."id" IS NOT NULL)) ORDER BY "public"."CubeMint"."minedAt"
OFFSET $2
```

layer3-app 100%



layer3-app prisma.internal prisma:engine:db_query

7.47ms 0.48% total exec time

Span: Overview Infrastructure Metrics Logs 0 Network Processes Profiles

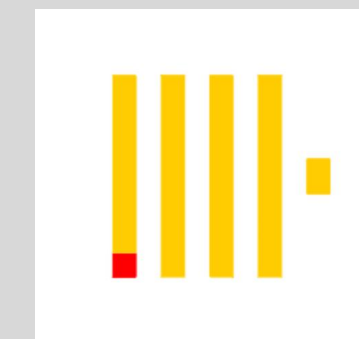
```
SELECT "public"."Token"."id", "public"."Token"."name", "public"."Token"."iconCid", "public"."Token"."iconMetadata",  
"public"."Token"."symbol", "public"."Token"."address", "public"."Token"."decimals", "public"."Token"."usdPrice",  
"public"."Token"."chainId" FROM "public"."Token" WHERE "public"."Token"."id" IN ($1) OFFSET $2
```

`docker-compose.yml`

```
services:  
  - clickhouse  
  - otel-collector
```



`my-ch-traces-db`

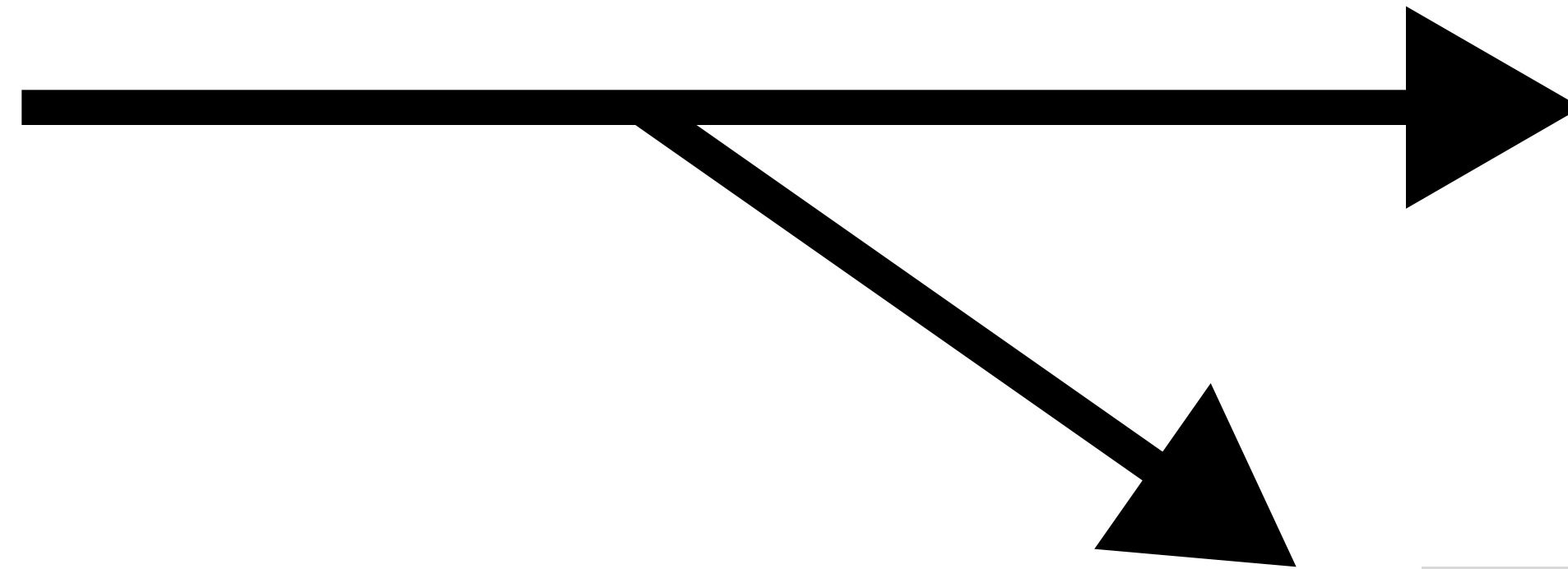


app



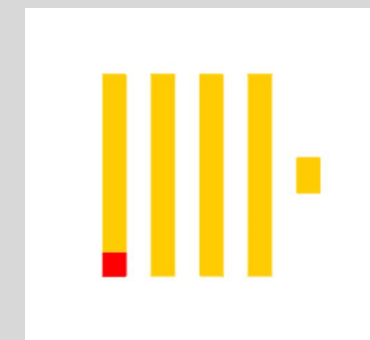
DATADOG

app



DATADOG

my-ch-traces-db



Query	Mean	Total duration	Calls
> SELECT SUM("amoun...	308.4ms	901008863s (73.45%)	2921326 (115 calls/min)
> SELECT SUM("amoun...	52.1ms	72946360s (5.95%)	1399317 (58 calls/min)
> SELECT "public"."...	8952.9ms	68498810s (5.58%)	7651 (19 calls/min)
> SELECT COUNT(*) F...	44.4ms	62151273s (5.07%)	1399317 (58 calls/min)
> SELECT "public"."...	632.6ms	31600375s (2.58%)	49957 (38 calls/min)
✓ SELECT "public"."...	73.8ms	18773913s (1.53%)	254279 (134 calls/min)

```
SELECT "public"."CubeMint"."id", "public"."CubeMint"."cubeReceiptId",
"public"."CubeMint"."txHash", "public"."CubeMint"."chainType",
"public"."CubeMint"."chainId", "public"."CubeMint"."tokenId",
"public"."CubeMint"."solanaTokenAddress", "public"."CubeMint"."isFinal",
"public"."CubeMint"."feeCurrency", "public"."CubeMint"."feeAmount",
"public"."CubeMint"."formattedFeeAmount", "public"."CubeMint"."minedAt",
"public"."CubeMint"."createdAt", "public"."CubeMint"."updatedAt" FROM "public"."CubeMint"
WHERE ("public"."CubeMint"."id") IN (SELECT "t0"."id" FROM "public"."CubeMint" AS "t0"
JOIN "public"."CubeReceipt" AS "j0" ON ("j0"."id") = ("t0"."cubeReceiptId") WHERE
("j0"."userId" = $1 AND "t0"."id" IS NOT NULL)) ORDER BY "public"."CubeMint"."minedAt"
OFFSET $2
```

```
SELECT *
```

```
FROM clickhouse_db.otel_traces
```

```
WHERE attributes["db_statement"] = "XXX"
```

Query	Mean	Total duration	Calls	Prisma	TRPC paths
> SELECT SUM("amoun...	308.4ms	901008863s (73.45%)	2921326 (115 calls/min)	BetSubmission.aggregate	bet.getBet
> SELECT SUM("amoun...	52.1ms	72946360s (5.95%)	1399317 (58 calls/min)	BetSubmission.aggregate	bet.getBet (+1)
> SELECT "public"."...	8952.9ms	68498810s (5.58%)	7651 (19 calls/min)	Quest.findMany	collection.getPaginatedCollections
> SELECT COUNT(*) F...	44.4ms	62151273s (5.07%)	1399317 (58 calls/min)	BetSubmission.count	bet.getBet (+2)
> SELECT "public"."...	632.6ms	31600375s (2.58%)	49957 (38 calls/min)	Quest.findMany	quest.getQuestsInProgress
✓ SELECT "public"."...	73.8ms	18773913s (1.53%)	254279 (134 calls/min)	CubeMint.findMany	jackpot.getUserJackpotBonuses (+6)

```
SELECT "public"."CubeMint"."id", "public"."CubeMint"."cubeReceiptId",
"public"."CubeMint"."txHash", "public"."CubeMint"."chainType",
"public"."CubeMint"."chainId", "public"."CubeMint"."tokenId",
"public"."CubeMint"."solanaTokenAddress", "public"."CubeMint"."isFinal",
"public"."CubeMint"."feeCurrency", "public"."CubeMint"."feeAmount",
"public"."CubeMint"."formattedFeeAmount", "public"."CubeMint"."minedAt",
"public"."CubeMint"."createdAt", "public"."CubeMint"."updatedAt" FROM "public"."CubeMint"
WHERE ("public"."CubeMint"."id") IN (SELECT "t0"."id" FROM "public"."CubeMint" AS "t0" INNER
JOIN "public"."CubeReceipt" AS "j0" ON ("j0"."id") = ("t0"."cubeReceiptId") WHERE
("j0"."userId" = $1 AND "t0"."id" IS NOT NULL)) ORDER BY "public"."CubeMint"."minedAt" DESC
OFFSET $2
```

Observability data

Prisma spans:

CubeMint.findMany (310)

Service names:

layer3-app (305)
cube-mint-tx-backfiller (10)
solana-cube-mint-tx-backfiller (3)

Average duration: 84 ms

TRPC spans:

jackpot.getUserJackpotBonuses (159)
cube.getCubeMintsForUser (88)
questCompletion.completeQuest (19)
streak.completeStreak (10)
jackpot.getUserJackpotProgress (9)
cube.getCubeMintsCountForUser (1)
questSten.completeQuestSten (1)

Http paths:

/api/trpc (285)

github repo: <https://github.com/larskarbo/microblame>



Lars Karbo

Full stack engineer @ Layer3

@larskarbo

larskarbo.no