

# The CPU started increasing without reason

Last updated by | Gaby Ramirez | Feb 9, 2021 at 10:57 AM PST

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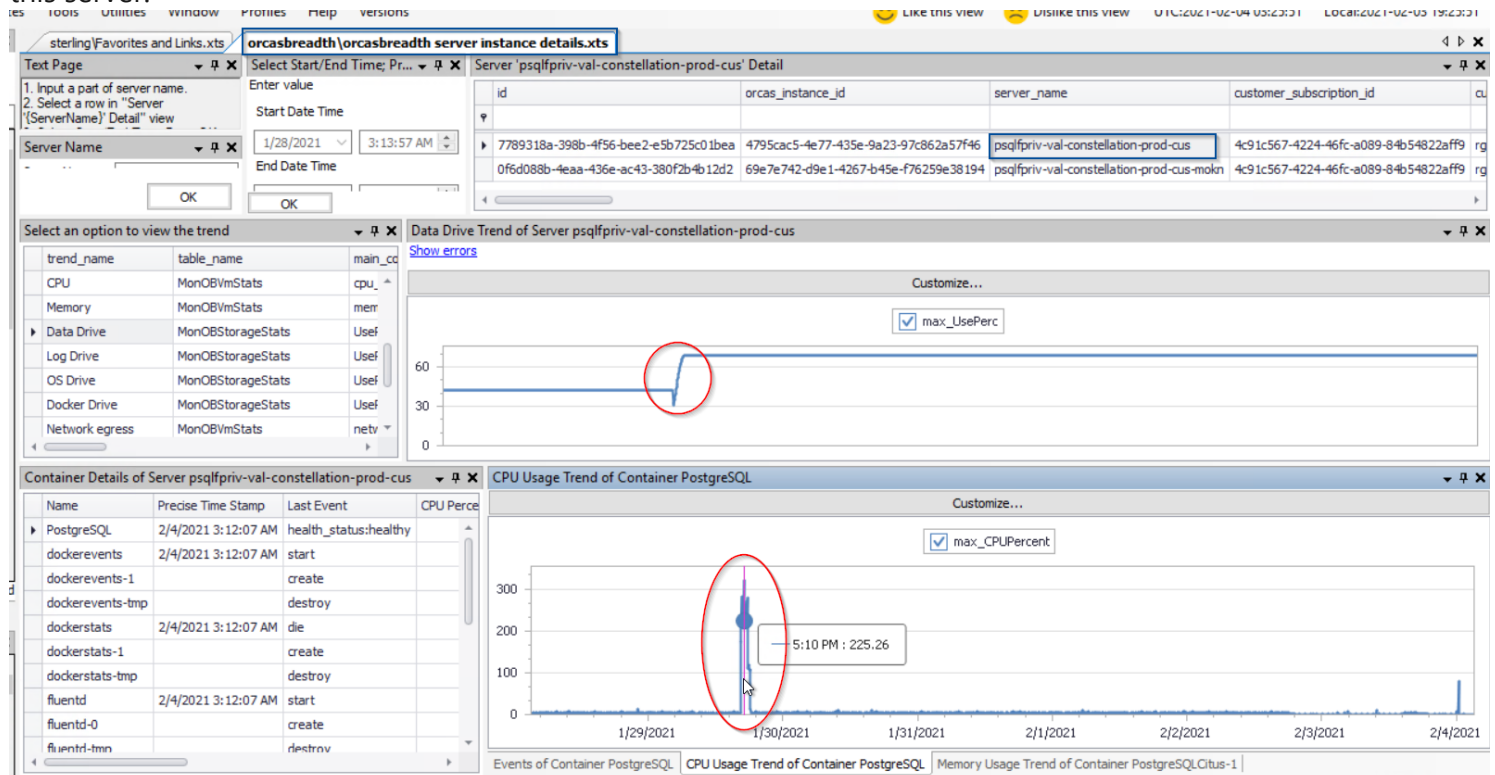
## Issue

The CPU started increasing without reason

## Investigation/Analysis

- First thing you need to have is SPECIFIC TIMESTAMP and TIMEZONE.
- Run ASC in the TIMESTAMP and check CPU, Storage, Memory, IOPS, Sandbox, Operations try to check everything.
- You can also run Jarvis [Customer Facing Metrics](#) and analyze the telemetry.
- Open XTS, and look for the view *orcasbreadth server instance details.xts*

Check if the customer *pg cpu* increase are related to the *pg\_wal* file upload SAS token expire issue happening in this server.



-Open Kusto and run the below query, and it will let you know if the server failed due to authenticate.

OBvmagentsidecarpgsql

| where LogicalServerName =~ "psqlfpriv-val-constellation-prod-cus"

| where MessageString contains "WAL"

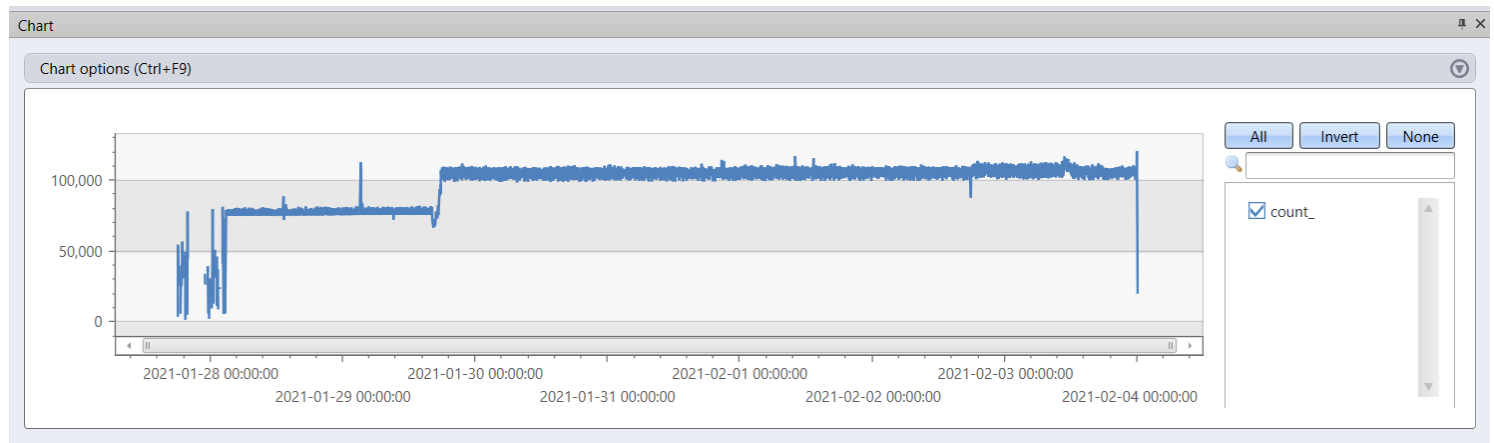
| where MessageString contains "Status: 403 (Server failed to authenticate the request)"

| order by TIMESTAMP desc

| project PreciseTimeStamp, LogicalServerName, LogType, MessageString

| summarize count() by bin(PreciseTimeStamp, 3m)

| render timechart



## Mitigation

With this result you can file an ICM asking to the product group if they are able to find an exception on PG\_Wal. If yes, they should run the below command to refresh SAS token.

```
PS C:\Users\huih\SqlAzureConsole> Reset-OrcasBreadthSasTokenOnVm
>> -SubscriptionId "4c91c567-4224-46fc-a089-84b54822aff9"
>> -ResourceGroupName "rg-val-sqlsvc-prod-cus"
>> -ServerName "psqlfpriv-val-constellation-prod-cus"
>> -StorageUseKind "LogArchiveTarget"
>> -StorageKind "BlobContainer"
>> -Minutes 480
>> -Permissions "rwld"

SubscriptionId : 4c91c567-4224-46fc-a089-84b54822aff9
ResourceGroupName : rg-val-sqlsvc-prod-cus
ServerName : psqlfpriv-val-constellation-prod-cus
StorageUseKind : LogArchiveTarget
StorageKind : BlobContainer
Minutes : 480
Permissions : rwld
SasToken : https://b676cc309935sa.blob.core.windows.net/4795cac54e77435e9a2397c862a57f46bak?sv=2019-02-02&se=2021-02-04T08%3A24%3A31Z&sr=c&sp=rwdl&sig=7KBSLDz1if2zhgygcJsReI4tPwnbIFQGPADRDITt1%2Fg%3D
Message :
WalReplica :
```

The issue is the SAS refresh actor has been disabled and you can check it with the below query:

/// sas token refresh actor (from aka.ms/copyq)

let SERVERNAME\_ARG="psqlfpriv-val-constellation-prod-cus";

```
let STARTTIME_ARG=ago(30m);
```

```
let ENDTIME_ARG=now();
```

```
MonOBDDirectorV2ActorEvents
```

```
| where strlen(SERVERNAME_ARG) == 0 or ServerName == SERVERNAME_ARG
```

```
| where STARTTIME_ARG < TIMESTAMP and TIMESTAMP < ENDTIME_ARG
```

```
| where ActorName == "LogArchiveTargetSasRefreshActor"
```

```
| where Message !startswith "Initialization Done for Log Archive Target SAS Refresh Actor."
```

```
| project PreciseTimeStamp, Status, Message, ExceptionMessage, StackTrace
```

You will get something like this:

PreciseTimeStamp	Status	Message
2021-02-04 00:22:04.3169619	Completed	SERVICE ENGINE [SasTokenRefreshActors] - Actor is DISABLED, will not run : Actor LogArchiveTargetSasRefreshActor for Server Id 17057
2021-02-04 00:42:04.3470421	Completed	SERVICE ENGINE [SasTokenRefreshActors] - Actor is DISABLED, will not run : Actor LogArchiveTargetSasRefreshActor for Server Id 17057

Finally the product group need to enable the *actor* with the following command, you can provide it.

```
Set-OrcasBreadthDirectorActorEnabled -ActorName LogArchiveTargetSasRefreshActor -ServerName psqfpriv-  
val-constellation-prod-cus -OrcasInstanceId 4795cac5-4e77-435e-9a23-97c862a57f46
```

## Root Cause Classification

High CPU usage due to PG\_wal upload issue caused by some existing bug, we have fix which will roll out soon. for now, stop and start (restart is fine) have small chance cause this issue

You can check this case: 121020321002366 ICM reference: 226209262