

# PostgreSQL Gateway Restart

Last updated by | Hamza Aqel | Jan 25, 2022 at 2:03 AM PST

**Please don't modify or move as this is part of GT , please contact [haaqel@microsoft.com](mailto:haaqel@microsoft.com) if needed**

Some customers are sharing that they are suddenly facing interruptions during query executions without any indications of server restart, one of the reasons of such disconnections during query executions, or unexpected connections close is that the gateway restarted, to check further, you can use this TSG.

1. Use the ping tool to find the CR:

```
C:\Users\haaqel>ping haqelmysql1.mysql.database.azure.com
Pinging cr5.westeurope1-a.control.database.windows.net [13.69.105.208] with 32 bytes of data:
```

2. Use the below query after selecting the proper region:

MonClusterLoad

```
| where event == "node_state_report"
| where TIMESTAMP > datetime(2021-12-17 00:00) and TIMESTAMP < datetime(2022-01-24 05:00)
| where ClusterName startswith "cr5" and node_name startswith "GW" and node_status != 'Up'
| summarize count(), min(originalEventTimestamp), max(originalEventTimestamp) by node_name,
node_status ,ClusterName
```

node_name	node_status	ClusterName	count_	min_originalEventTimestamp ▲	max_originalEventTimestamp ▲
GW.34	Down	cr5.westeurope1-a.control.database.windows.net	4	2021-12-24 14:28:18.6377309	2021-12-24 14:43:18.8916470
GW.22	Disabling	cr5.westeurope1-a.control.database.windows.net	1	2022-01-01 00:31:33.1886538	2022-01-01 00:31:33.1886538
GW.22	Down	cr5.westeurope1-a.control.database.windows.net	9	2022-01-01 00:38:48.1361643	2022-01-01 01:16:33.9980441

and correlate the above timespamps with one the time of the customer issue.

Or you can check the same from ASC in Connectivity tab:

## Gateway Restart Information

[Export Data](#)

Gateway Restart Information (SERVER: prod-service-data-v11)

Drag a column header and drop it here to group by that column

NodeName	process_id	ClusterName	StartTime	EndTime
+ GW.9	12000	cr7.eastus2-a.control.database.windows.net	2022-01-16 07:16:17	2022-01-17 13:43:49
+ GW.9	15208	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 06:30:17
+ GW.8	14464	cr7.eastus2-a.control.database.windows.net	2022-01-16 06:26:44	2022-01-17 13:43:49
+ GW.8	13912	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 06:39:03
+ GW.7	15020	cr7.eastus2-a.control.database.windows.net	2022-01-16 05:29:41	2022-01-17 13:43:58
+ GW.7	14060	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 04:57:28
+ GW.6	12892	cr7.eastus2-a.control.database.windows.net	2022-01-16 04:31:50	2022-01-17 13:42:54
+ GW.6	4976	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 04:02:06
+ GW.59	11628	cr7.eastus2-a.control.database.windows.net	2022-01-16 02:44:30	2022-01-17 13:42:58
+ GW.59	4764	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 02:09:12
+ GW.58	11456	cr7.eastus2-a.control.database.windows.net	2022-01-16 02:06:19	2022-01-17 13:42:55
+ GW.58	10504	cr7.eastus2-a.control.database.windows.net	2022-01-01 15:49:00	2022-01-16 01:26:03
+ GW.57	24828	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:14:18	2022-01-17 13:43:58
+ GW.57	11548	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:11:57	2022-01-16 01:13:47
+ GW.57	10048	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:08:54	2022-01-16 01:10:50
+ GW.57	25508	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:06:10	2022-01-16 01:08:06
+ GW.57	18176	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:03:36	2022-01-16 01:05:32
+ GW.57	19088	cr7.eastus2-a.control.database.windows.net	2022-01-16 01:01:11	2022-01-16 01:03:07
+ GW.57	21768	cr7.eastus2-a.control.database.windows.net	2022-01-16 00:58:55	2022-01-16 01:00:51
+ GW.57	14792	cr7.eastus2-a.control.database.windows.net	2022-01-16 00:56:44	2022-01-16 00:58:39

duplicate names in GW node name means that there was a GW restart , correlate again the time when the customer issue happened with these time frames.

3. If we are out of telemetry data , you can check the same using [Jarvis link](#) :

←→↺

https://jarvis-west.dc.ad.msft.net/logs/dgrep

Jarvis

DashboardHealthLogsActionsManageAgentOrb

DGrepKusto

Q Server Query

OpenSaveSettingsLink

Endpoint

Diagnostics PROD

Namespace

WASD2Prod

Events to search

type event name...

Select All

MonClusterLoad

AdpAccessData

AirBackup

AirCapacityService

Show Azure security pack events

Time range

Now04/01/2021 18:17 UTC

50

Days

-5mins-1 min+1 min+5mins

12351530

Scoping conditions

Add Index

Region

==

Japan East

Field

Filtering conditions

SimpleMQLKQL

event

==

node\_state\_report

node\_name

contains

GW

node\_status

!=

Up

ClusterName

contains

cr2

Field

Miscellaneous

Searching (228 results)

Hide details

Search ID: 048d1128-3928-7ae9-076a-6616c5aedca1

240.42 GB Enumerated

240.42 GB Scheduled

240.19 GB Processed

Client Query

1 source

2 | summarize count(), min(originalEventTimestamp), max(originalEventTimestamp) by node\_name, node\_status

3 | sort by min\_originalEventTimestamp asc

Logs36Find... prefix with '-' to negateChart

node_name	node_status	min_originalEventTimestamp	max_originalEventTimestamp
GW.17	Down	05-01-2021 16:14:06	05-01-2021 16:44:06
GW.17	Disabled	05-01-2021 16:45:39	05-01-2021 16:45:39
GW.18	Down	05-01-2021 16:59:06	05-01-2021 16:59:06

Created with Microsoft OneNote 2016.

Canned RCA:

Between xxxxxx and xxxxxx AM/PM UTC underlying gateway node(s) was restarted because of a repair job. There is no ongoing issue with the server. We have multiple gateway nodes that serves the connections for all the servers in a region. Whenever service fabric detects an issue with a particular node it takes it out of the pool to run a repair job/ platform maintenance and get the node healthy again. During this time as there are other nodes that still continue to serve the connections, there would be a minor transient blip in the connectivity for some servers and existing connections that are served from this node gets reset, this is because our connections are always proxied via gateway. So if there are long running jobs from connections served from this node, that might get affected. From a new connection standpoint it should still go through.

Mitigation: No manual mitigation performed , node defect triggers Azure platform maintenance à DB minor transient blip on existing connections; none on new connections. To minimize the impact of such deployments , you can apply a [resilient application code](#) or implement [PgBouncer](#) which has a build in retry logic , we advise you to consider our [Flexible Server](#) offering where you will not face such interruptions , unlick the single server offering.

How good have you found this content?

https://supportability.visualstudio.com/AzureDBPostgreSQL/\_wiki/wikis/AzureDBPostgreSQL/576531/PostgreSQL-Gateway-Restart

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