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 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 guery after selecting the proper region:

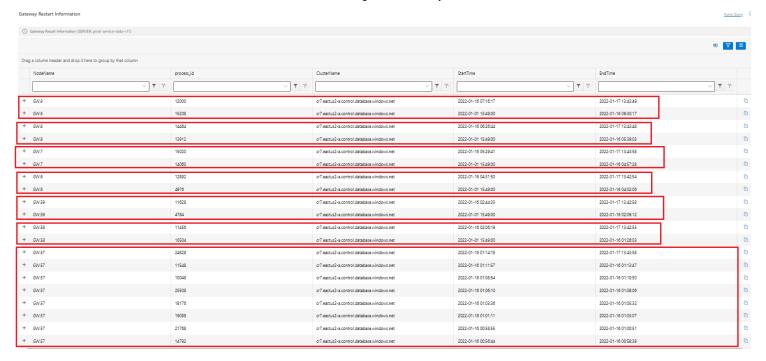
MonClusterLoad

```
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</pre>
```

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

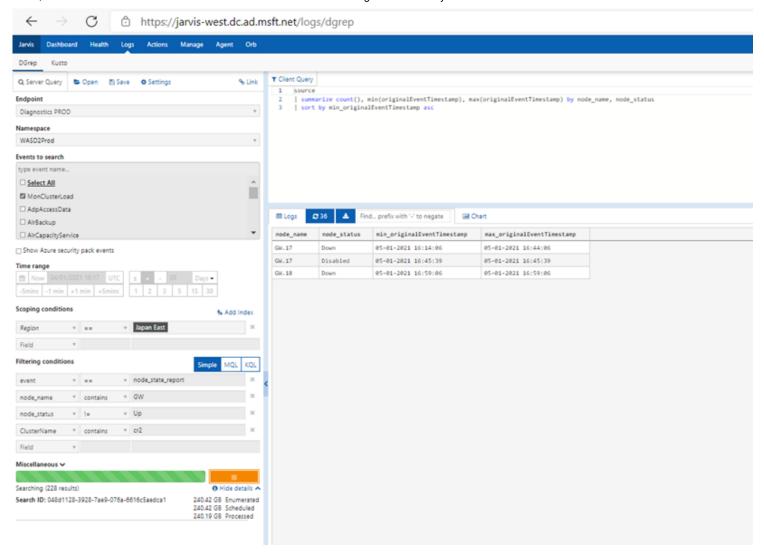
and correlate the above timespamps with one the time of the customer issue.

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



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:



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 <u>resilient application code</u> or implement <u>PgBouncer</u> which has a build in retry logic, we advise you to consider our <u>Flexible Server</u> offering where you will not face such interruptions, unlick the single server offering.

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