

PostgreSQL Block Corruption

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

In case an incident report that there is a block corruption or, the server reported "ERROR: invalid page in block X of relation base .." , you can check the below :

1. Query Kusto for invalid block logs in the region specified in the alert:

MonRdmsPgSqlSandbox

```
| where LogicalServerName == "circulationservicedb"
| where TIMESTAMP >= ago(3d)
| where text contains "invalid page in block"
| project TIMESTAMP,text
```

TIMESTAMP	text
2022-01-15 17:28:52.8372967	2022-01-15 17:28:51 UTC-61e302ae.18248-ERROR: invalid page in block 108794 of relation base/16554/52917
2022-01-15 17:35:42.8401065	2022-01-15 17:35:40 UTC-61e30453.182e0-ERROR: invalid page in block 108794 of relation base/16554/52917
2022-01-15 17:43:12.8745809	2022-01-15 17:43:10 UTC-61e30615.18360-ERROR: invalid page in block 108794 of relation base/16554/52917
2022-01-15 17:50:12.8770904	2022-01-15 17:50:11 UTC-61e307ba.183d8-ERROR: invalid page in block 108794 of relation base/16554/52917

2. Checking the object details from the customer side:

```
postgres=# select datname from pg_database where oid=16554;
```

```
datname
-----
circulation
```

```
circulation=# select pg_filenode_relation(0, 52917) ;
```

```
pg_filenode_relation
-----
circulation."circulationPK"
```

How to fix :

- Since the object is corrupted, we need to repair it. We have to work with CSS/Customer to fix the issue:
 - a. If the relation is an index, we recommend drop and recreate it.
 - b. If it is a table:

1. Ask the customer to Try VACUUM FULL <tablename>, it might fix the corruption.
 2. if the vacuum did not here , we recommend creating a PITR server(s) and using it to recover the data.`
- If the customer gave the consent to repair the data(which involves some data loss), please File an ICM