

# OOM issue due to memory leak from the Connection object

Last updated by | Vitor Tomaz | Nov 22, 2021 at 10:30 AM PST

---

## Contents

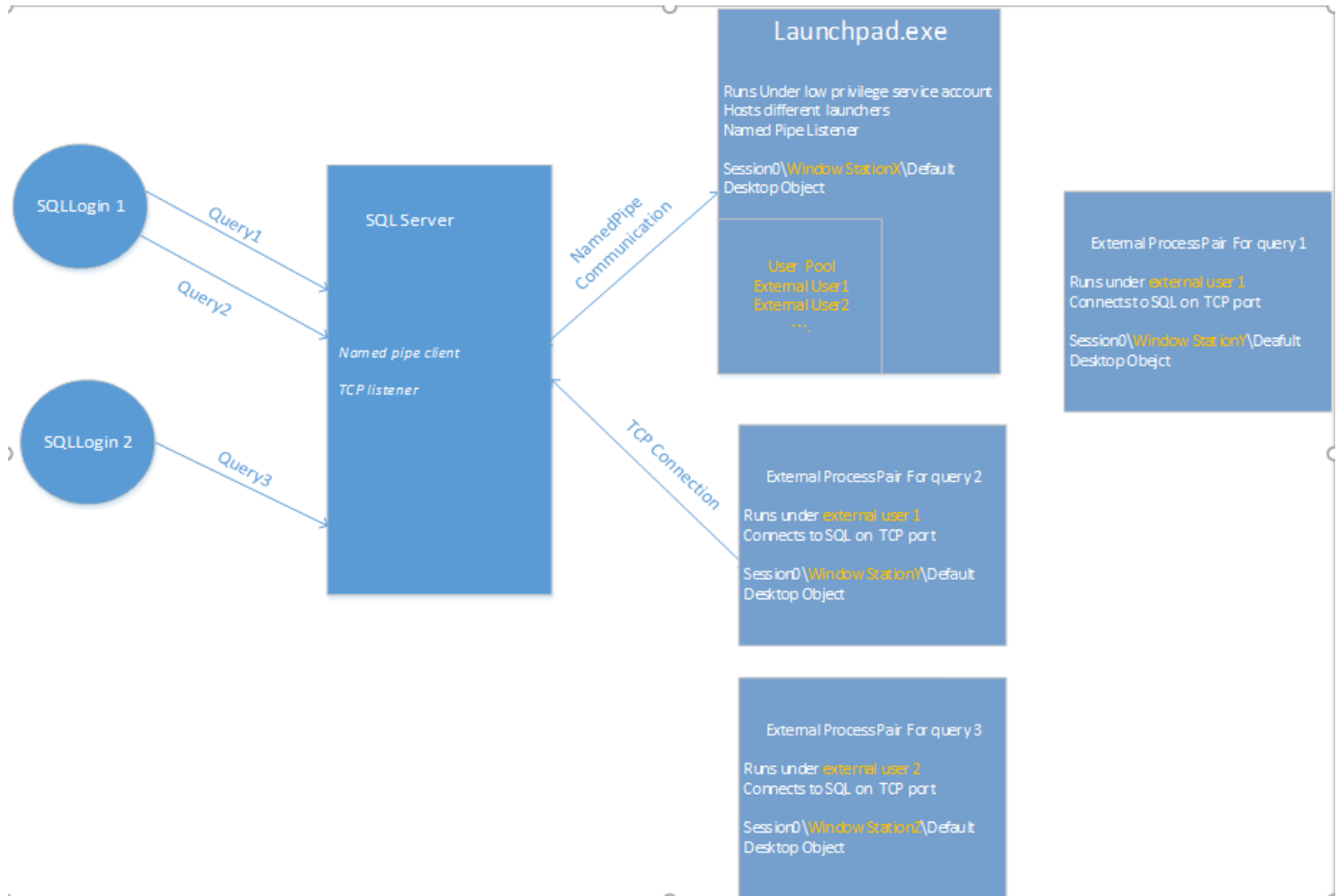
- [Issue](#)
- [Investigation/Analysis](#)
- [Mitigation](#)
- [RCA \(optional\)](#)
- [Root Cause Classification](#)

## Issue

OOM issue due to memory leak from the Connection object

If we have too many connections along with OOM issues we will need to investigate if there is a memory leak due to Connection Objects

A package launcher service (XdbPackageLauncher) launches launchpad on first query execution. SQL serves as the server end for communication between Xdb package launcher and SQL. Communication is done over a namedpipe connection through Namedpipe acing, Only xdb package launcher can connect to SQL over named pipe. XdbPackageLauncher Launches Sandbox Process



## Investigation/Analysis

We will need to check the number of XdbPackageLauncher and Launchpad connections

### To display total connection counts in descending order:

```
MonExtensibilityTrace | project TIMESTAMP , AppName , LogicalServerName , trace_message
| where trace_message contains "XdbPackage launcher listener received new connection." or
|   trace_message contains "Sql Server received a connection from launchpad"
| summarize ecount = count() by AppName, LogicalServerName, trace_message
| project AppName , LogicalServerName , trace_message , ecount
| order by ecount desc
```

### Check XdbPackageLauncher connections in the past 7 days:

```
MonExtensibilityTrace
| where TIMESTAMP > ago(7d)
| where AppName contains "d3ce584d5ddc"
| where trace_message contains "XdbPackage launcher listener received new connection."
| project TIMESTAMP , AppName , LogicalServerName , trace_message
| order by TIMESTAMP desc
```

### Check Launchpad connections in the past 7 days:

```
MonExtensibilityTrace
| where TIMESTAMP > ago(7d)
| where AppName contains "d3ce584d5ddc"
| where trace_message contains "XdbPackage launcher listener received new connection."
```

```
| project TIMESTAMP , AppName , LogicalServerName , trace_message
| order by TIMESTAMP desc
```

**Display all the XdbPackageLauncher and Launchpad connections in the past 7 days:**

### 1. When instance name is provided.

```
MonExtensibilityTrace
| where TIMESTAMP > ago(7d)
| where AppName contains "d3ce584d5ddc"
| where trace_message contains "XdbPackage launcher listener received new
connection." or trace_message contains "Sql Server received a connection from launchpad"
| project TIMESTAMP , AppName , LogicalServerName , trace_message
| order by TIMESTAMP desc
```

### 2. When LogicalServerName is provided.

```
MonExtensibilityTrace
| where TIMESTAMP > ago(7d)
| where LogicalServerName contains "testServer"
| where trace_message contains "XdbPackage launcher listener received new
connection." or trace_message contains "Sql Server received a connection from launchpad"
| project TIMESTAMP , AppName , LogicalServerName , trace_message
| order by TIMESTAMP desc
```

**Verify that the issue is actually due to the memory leak due to large number of connection attempts.**

**Check the Timestamps to ensure that the issue is currently still happening.**

We can modify the query to check for data from previous 1 day to check the total number of records. [we can alter timestamp to check 1 day like this: `where TIMESTAMP > ago(1d)`, rest of the query remains the same

## Mitigation

If this is due to Connection Object Leak we will require the Engineering Team to Mitigate this using CAS command to restart **Queue Name** Extensibility (ML Services & Language Extensions on SQL Azure)

## RCA (optional)

Check if the OOM issue is due to Connection Object Leak

## Root Cause Classification

Cases resolved by this TSG should be coded to the following root cause: <Root cause path>

## How good have you found this content?



-