Managed instance unavailable after upgrade due to msdb - system schema owning jobs

Last updated by | Vitor Tomaz | Feb 24, 2023 at 3:32 AM PST

Contents

- Issue
- Investigation/Analysis
- Mitigation
- Internal reference

Issue

Customer not able to access Managed Instance after Planned Maintenance. Managed Instance unavailability is reported on the Azure Portal.

Investigation/Analysis

Looking at MonSQLSystemHealth we can see that the upgrade is failing on msdb:

```
MonSQLSystemHealth
| where PreciseTimeStamp > ago(30m)
| where AppName == "e0667a98a964" or LogicalServerName == 'azvisualsql'
| project TIMESTAMP, AppName, NodeName, error_id, message
```

2022-02-14 20:19:24.62 spid117s Error: 2714, Severity: 16, State: 6. 2022-02-14 20:19:24.62 spid117s [Filtered Args] There is already an object named 'DatabaseMailUserRole' in the database.

2022-02-14 20:19:24.62 spid117s Error: 2759, Severity: 16, State: 0. 2022-02-14 20:19:24.62 spid117s [Filtered Args] CREATE SCHEMA failed due to previous errors.

2022-02-14 20:19:24.62 spid117s Error: 912, Severity: 21, State: 2. 2022-02-14 20:19:24.62 spid117s **Script level upgrade for database 'msdb' failed because upgrade step 'Sql.Msdb.Sql' encountered error 2714, state 6, severity 25.** This is a serious error condition which might interfere with regular operation and the database will be taken offline. If the error happened during upgrade of the 'master' database, it will prevent the entire SQL Server instance from starting. Examine the previous errorlog entries for errors, take the appropriate corrective actions and re-start the database so that the script upgrade steps run to completion.

2022-02-14 20:19:24.62 spid117s Error: 41629, Severity: 16, State: 0. 2022-02-14 20:19:24.62 spid117s Fabric replica publisher encountered an error (SQL Error Code: 912, State: 2) while publishing event 'FABRIC_REPLICA_STATE_CHANGE' to subscriber of type 'SUBSCRIBER_TYPE_FABRIC_GENERIC' on Fabric partition 'msdb' (partition ID: 'D5533928-CE47-429F-B268-9382AC488E41'). Refer to the SQL error code for more details. If this condition persists, contact the system administrator.

Now, looking at the first two records, we can see that a CREATE SCHEMA is failing because already exists.

During upgrades, when upgrading msdb, the process might have to drop a recreate schema owned objects. If the schema ownership is changed, the first step will not delete the objects that will be created afterwards during the upgrade. This will make the upgrade fail.

To check schema ownership:

```
SELECT schema_name, schema_owner
FROM information schema.schemata
```

Mitigation

Since the Managed Instance is down, only the PG is able to perform mitigation.

From customer side, he needs to make sure that he doesn't change the ownership of system owned schemas. This is documented here <a href="https://example.com/here-picture/doesn't change the ownership of system owned schemas.

Changing the predefined role names, schema names and schema owners by customers will impact the normal operation of the service.

Internal reference

289095583 ^[2]

How good have you found this content?

