

17k limit rest API limit for Data Sync

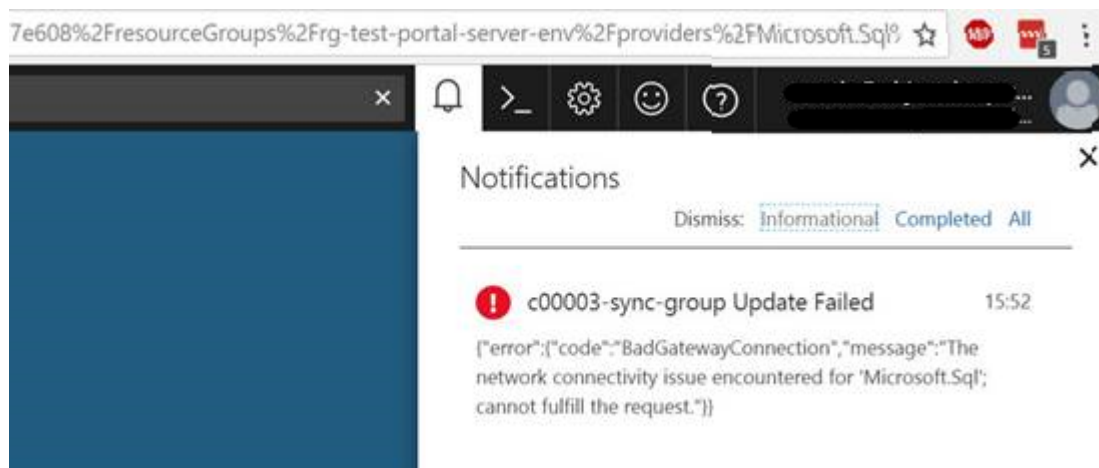
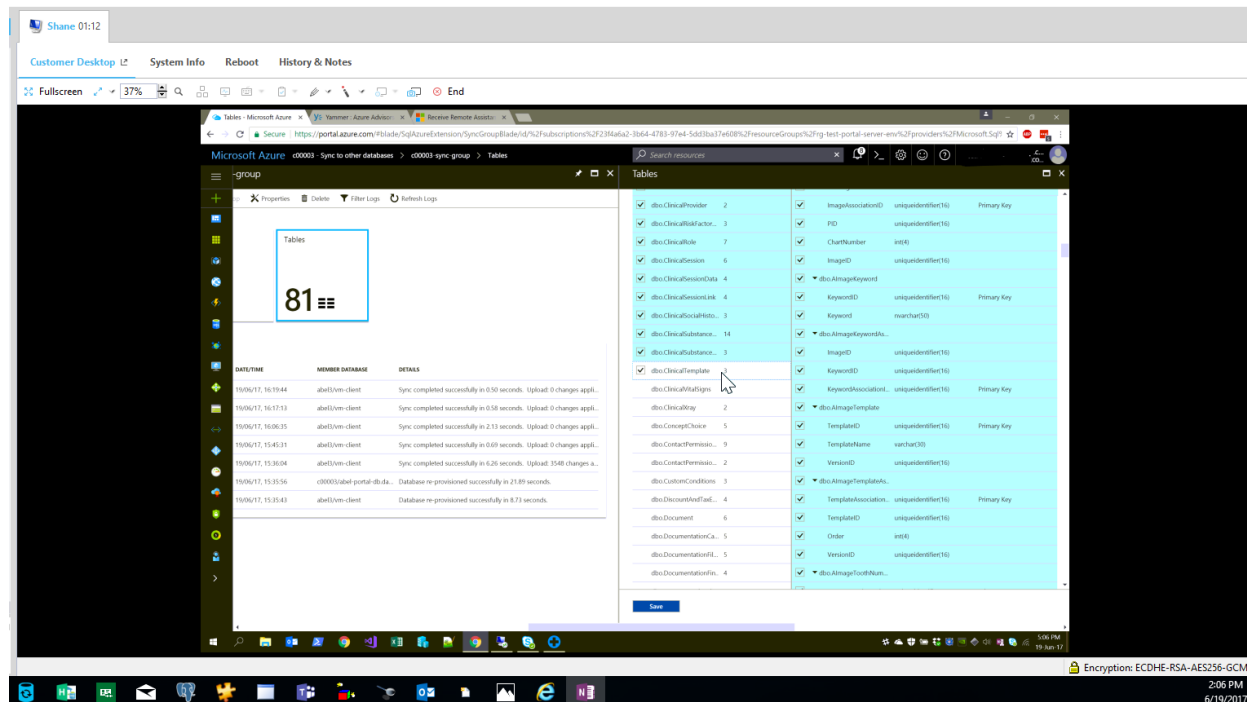
Last updated by | Keith Elmore | Apr 5, 2021 at 7:57 AM PDT

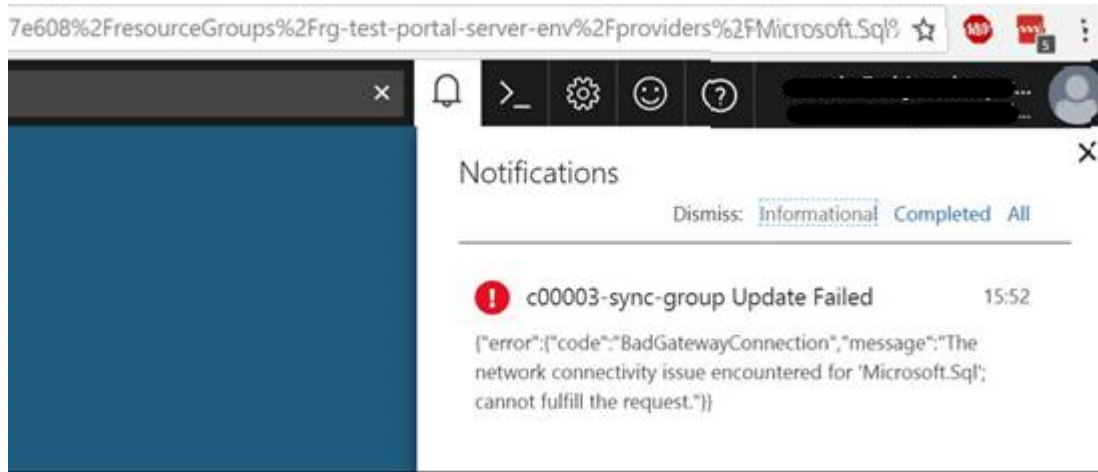
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There is known limitation of 17k for resource provider to arm. Issues arises when customer tries to select tables from Hub to synch tables to member. It auto-creates code when customer selects the tables and below error hits when that limit exceed during creation. It is not table level limit.

Sample error from customer side when select tables to sync





Note, this is limitation in rest API and the error coming from API before reaching the database and hence we do not see any request ID's.

Kusto Query to check server failures for sync related issues:-

<https://armprod.kusto.windows.net/ARMProd> [\[Run in Kusto.Explorer\]](#) [\[Run in Kusto.Explorer on SAW\]](#) [\[Run in Kusto.WebExplorer\]](#)

```
let SubscriptionId = "Input Subscription here";
let SyncGroupName = "c00004-sync-group";
let ResultCount = 100;
HttpIncomingRequests | where subscriptionId == SubscriptionId
| where operationName == "PATCH/SUBSCRIPTIONS/RESOURCEGROUPS/PROVIDERS/MICROSOFT.SQL/SERVERS/DATABASES/SYNCGRP"
| where targetUri contains strcat("/syncGroups/", SyncGroupName) and TaskName startswith "HttpIncomingRequestE"
| extend Response = extract("HttpIncomingRequestEndWith(.*)", 1, TaskName)
| order by TIMESTAMP desc
| limit ResultCount
| join kind=leftouter (HttpOutgoingRequests | where TaskName startswith "HttpOutgoingRequestEndWith" | project
| extend ServerException = split(ServerExceptionMsg, "\n")[0]
| project PreciseTimeStamp, Response, httpStatusCode, authorizationAction, durationInMilliseconds, ServerExcep
```

PreciseTimeStamp	Response	httpStatusCode	authorizationAction	durationInMilliseconds	ServerException
2017-06-19 20:51:53.1859246	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	424	
2017-06-19 20:55:42.3074663	ServerFailure	502	Microsoft.Sql/servers/databases/syncGroups/write	10238	System.Net.Http.HttpRequestException: An error occurred while sending the request. ---> System.Net.WebException: The request was aborted: Could no
2017-06-19 20:56:06.6047042	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	498	
2017-06-19 20:56:39.8328893	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	107	
2017-06-19 20:57:34.6540797	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	249	
2017-06-19 20:59:14.7646676	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	284	
2017-06-19 20:59:55.2837722	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	546	
2017-06-19 21:00:26.9845085	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	122	
2017-06-19 21:01:05.3521533	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	125	
2017-06-19 21:01:39.6047777	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	118	
2017-06-19 21:02:22.8687593	Success	202	Microsoft.Sql/servers/databases/syncGroups/write	138	
2017-06-19 21:03:27.8992920	ServerFailure	502	Microsoft.Sql/servers/databases/syncGroups/write	10131	System.Net.Http.HttpRequestException: An error occurred while sending the request. ---> System.Net.WebException: The request was aborted: Could no
2017-06-19 21:03:59.4267428	ServerFailure	502	Microsoft.Sql/servers/databases/syncGroups/write	10121	System.Net.Http.HttpRequestException: An error occurred while sending the request. ---> System.Net.WebException: The request was aborted: Could no
2017-06-19 21:08:15.8442173	ServerFailure	502	Microsoft.Sql/servers/databases/syncGroups/write	10333	System.Net.Http.HttpRequestException: An error occurred while sending the request. ---> System.Net.WebException: The request was aborted: Could no

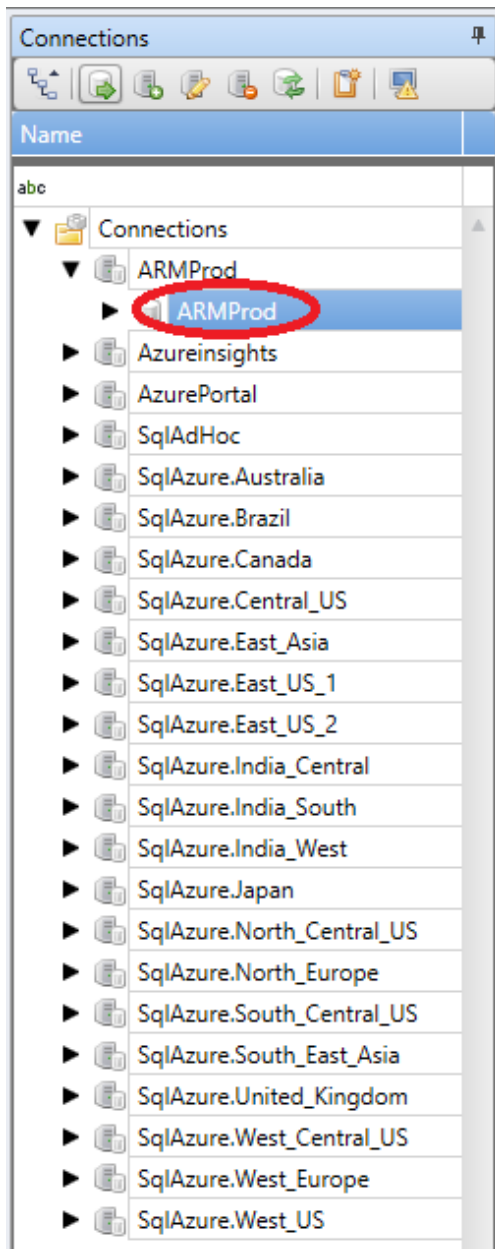
If you can see any record that:

- Response = ServerFailure
- httpStatusCode = 502
- durationInMilliseconds >= 10000
- ServerException contains "The request was aborted: Could not create SSL/TLS secure channel."

Then it was caused by this bug.

You might want to check PreciseTimeStamp as well to see if it matches.

You need to select ARMPROD to run above query



Issue

"Cannot insert the value NULL into column 'provision_timestamp', table 'prd_honeywell_core.DataSync.provision_marker_dss'; column does not allow nulls. INSERT fails. The statement

has been terminated," when attempting to perform a Sync operation.

Root cause

Data sync does not support using geo-copied\restored database if the source database is already in sync-relation. The reason is if the database is in sync relation, it already contains a lot of sync-related information about the current sync, like trigger, tracking table, SP and etc. So by using geo-replication and restore, these information will be blindly copied\restored to the new database. When the new database is added into new sync groups, it can mess up the new sync relation.

Mitigation

For mitigation, customer needs to delete all sync-related objects on hub\member. Below Scripts to run for clean up

```
--We want to drop all user table start with datasync and contains _dss
select * from sys.tables as st
join sys.schemas as ss on ss.schema_id = st.schema_id
where ss.name = 'DataSync' and st.name like '%_dss%'

--generate the script to drop data sync tables
select 'Drop table [DataSync].['+ st.name+ '];'
from sys.tables as st
join sys.schemas as ss on ss.schema_id = st.schema_id
where ss.name = 'DataSync' and st.name like '%_dss%'

-- list data sync store procedures
select * from sys.procedures as sp
join sys.schemas as ss on ss.schema_id = sp.schema_id
where ss.name = 'DataSync' and sp.name like '%_dss_%'

-- generate the script to drop data sync store procedures
select 'Drop procedure [DataSync].['+ sp.name+ '];' from sys.procedures as sp
join sys.schemas as ss on ss.schema_id = sp.schema_id
where ss.name = 'DataSync' and sp.name like '%_dss_%'

-- list triggers for data sync
select * from sys.triggers as st
where st.name like '%_dss%' and st.name like '%trigger'

-- delete datasync triggers if there is any
select 'Drop trigger ['+st.name+']' from sys.triggers as st
where st.name like '%_dss%' and st.name like '%trigger'

-- list user-define for data sync
select * from sys.types as st
join sys.schemas as ss on st.schema_id = ss.schema_id
where ss.name = 'DataSync' and st.name like '%_dss_%'

-- generate script for dropping data sync-related udt
select 'Drop Type [DataSync].['+ st.name+ '];' from sys.types as st
join sys.schemas as ss on st.schema_id = ss.schema_id
where ss.name = 'DataSync' and st.name like '%_dss_%'
```

Classification

Root cause Tree - DataSync/Uncoded/Uncoded

How good have you found this content?

```
<div>
<span>
<a href='https://csswikifedback.azurewebsites.net/feedback/smile?wiki=AzureSQLDB&pageId=282832&pageTitle=17k
<img alt='Smile' src='https://sqldbwikifedback.blob.core.windows.net/assets/smile.png' >
</a>
</span>

<span>
<a href='https://csswikifedback.azurewebsites.net/feedback/frown?wiki=AzureSQLDB&pageId=282832&pageTitle=17k
<img alt='Sad' src='https://sqldbwikifedback.blob.core.windows.net/assets/sad.png' >
</a>
</span>
</div>
```