

# Logins to DB fail through FG endpoint

Last updated by | Vitor Tomaz | Aug 5, 2020 at 12:41 PM PDT

---

## Contents

- [Issue](#)
- [Mitigation steps](#)
- [Classification](#)

## Issue

We have a bug where if a customer tries to connect to a database through a failover group endpoint, but the database is not joined to the failover group, then they get back a 40613 state 127 error. If the DB is otherwise healthy, and still logins are failing due to 40613, then it could be this issue. This is easily diagnosed via Database Replicas.xts view.

**Step 1:** Check that customer is connecting via a FG endpoint. Looking at CR login traces in Database Replicas.xts view, check if the server\_name being connected to is not the same as the logical\_server\_name. This means that the connection is coming via an alias. It could be FG alias or Server DNS alias.

Sterling\Sterling Servers and Databases.xml Sterling\GeoDR Workflow Troubleshooting.xml Sterling\Gateway GeoDR ICM Incidents.xml **Database Replicas [ProdNCus1a-TR14]** Database Replicas [mids\_moniker]--(ring\_type)

▼ Step 2: Logical Database View for physical database "45e5e0e6-d9e6-4eb9-b0d1-bcb4add3883b"

db_cms_state	partition_health	app_state	edition	slo	max_size_GB	target_replica_set_size	read_scale_units	count_dbs_in_app	fabric_service_uri	logical_server_name	logical_database_name	pool_name
Ready	OK	READY	Standard	S2	250	1	0	1	fabric:/Worker.ISO/f5c680af7b7f/SQL-UserOb/45e5e0e6-d9e6-4eb9-b0d1-bcb4add3883b	mifile-services-efm	SSISDB	

▼ Step 4: WinFab Replica state

Hadron DMV - "DB.O"

node_name	replica_status_desc	replica_role_desc	replica_health_state_desc	node	replication_endpoint_url	last_hardened_lsn	last_redone_lsn	redo_queue_size	catchup_progress	end_of_log_lsn	internal_state_desc	database_state_desc
DB.O	READY	PRIMARY	OK	UP								

Hadron DMV ... In progress t... Seeding Throttle SQL CPU Loa... TR login succ... CAS comman... Fabric proper... Config Param... Feature Switc... Sessions Long Running... sysprocesses Recovery Trace

pace MB Data File Size MB log\_reuse\_wait\_desc backup\_start\_date backup\_finish\_date SQL Version

71.992187	704.000000	NOTHING	2/9/2018 9:01:29 PM	2/9/2018 9:01:29 PM	Microsoft SQL Server 2017 (RTM) - 14.0.1001.532 (x64)	Jan 30 2018 18:34:32	Copyright (C) 2017 Microsoft Corporation	CloudDB on Windows Server 2012 R2 Datacenter 6.3 <x64> (Build 9600:) (Hypervisor)
-----------	------------	---------	---------------------	---------------------	---	----------------------	--	---

ase Recovery info | Backup | Throttling reason (Double click to open in Liger) | JIT to "" | GeoDR/Update SLO Links | Encryption info

9721:04:23.0000000

Node Name	result	is_vnet_address	is_success	is_user_error	error	state	lookup_error_code	lookup_state	total_time_ms	enqueue_time_ms	server_name	instance_name
GW.8	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	65	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.15	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	154	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.0	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	169	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.2	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	194	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.11	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	169	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.16	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	19	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	17	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.15	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	166	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	13	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.17	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.17	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	10	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.17	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.17	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	11	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net
GW.15	e_oContinueSameState	0	1	0	0	0	0	SERVICE_ENDPOINT	164	0	mifile-services-efm.database.windows.net	f5c680af7b7f.tr14.northcentralus1-a.worker.database.windows.net
GW.6	e_oContinue	0	1	0	0	0	0	SERVICE_ENDPOINT	10	0	tcp:mifile-services-efm-falover.database.windows.net,1433	b229fefab687.tr14.northcentralus1-a.worker.database.windows.net

infiguration his... | DMV snapshots for... | GeoDR Replication ... | Hadr DMVs on ... | UCS Telemetry fro... | UCS Live connectio... | Hadr Transport Sta... | WinFab Logs from ... | RG events from "" ... | FabricDebug event... | TR login traces fro... | CR Login traces fro... | ErrorLog for "" fro... | PLB Movements on... | MonSqTransaction... | PerfCounters

CR Login traces from 2018-02-09T15:04:23.0000000 to 2018-02-09T21:04:23.0000000 rows: 159, selected rows: 1, selected cells: 1

**Step 2:** Verify that server belongs to a FG but database is not enlisted in that FG.

Query CMS: select \* from geodr\_failover\_groups where logical\_server\_name = '<server name>'

If server is not part of FG, then this TSG does not apply. The issue is something else.

Check in Database Replicas.xml view to see if DB is part of FG or not. If DB is not part of FG, then proceed with mitigation to add DB to FG. If DB is part of FG (in below diagram it is) then the issue is something else.

Step 2: Logical Database View for physical database "45e5e0e6-d9e6-4eb9-b0d1-bcb4add3883b"

replica_set_size	read_scale_units	count_obs_in_app	fabric_service_uri	logical_server_name	logical_database_name	pool_name	failover_group_name	link_type	link_role	copy_link_cnt	geo_partner_logical_server_name	geo_partner_logical_database_name
1	0	1	fabric:/Worker.ISO/5c680af7b7f7/SQLOperDb/45e5e0e6-d9e6-4eb9-b0d1-bcb4add3883b	mfile-services-efm	SSISDB		mfile-services-efm-failover	ContinuousCopy	Primary	1	mfile-services-efm-02	SSISDB

Step 4: WinFab Replica state

Hadron DMV - "DB\_0"

node_name	replica_status_desc	replica_role_desc	replica_health_desc	node_status_desc	node_health	replication_endpoint_url	last_harden_log	last_redone_log	redo_queue_size	catchup_progress	end_of_log_log	internal_state_desc	database_state_desc	partner_database	database
DB_0	READY	PRIMARY	OK	UP	WARNING	tcp://10.0.0.4:20222	502700000734400001			[     ] 100.00%	502700000733600001	GLOBAL_PRIMARY	ONLINE		
						mfile-services-efm-02 - SSISDB	502700000734400001	502700000732800001	0	[     ] 100.00%	502700000732800001			SSISDB	

reason (Double click to open in Liger) | JIT to TM | GeoDR/Update SLO Links | Encryption info

is_success	is_user_error	error	state	lookup_error_code	lookup_state	total_time_ms	enqueue_time_ms	logical_substep_failure_apiname	database_name	connection_id	driver_name	tds_version
1	0	0	0			16	0		SSISDB	EF0D9BC2-2836-4683-966B-00DEA9A075CE	.Net SqlClient Data Provider	1946157060
0	0	40613	127			161	0		SSISDB	387D151E-38F7-48D0-AE23-DFF0F06C817	.Net SqlClient Data Provider	1946157060
1	0	0	0			4	0		SSISDB	570B460D-9028-4702-831C-CC2C4C7D23E1	.Net SqlClient Data Provider	1946157060
0	0	40613	127			220	0		SSISDB	B5EE531C-60D5-49F1-857E-C7180D87F34F	.Net SqlClient Data Provider	1946157060
1	0	0	0			7	0		SSISDB	3CC83485-384B-4F6F-8A5B-9C69CEE4B7F8	.Net SqlClient Data Provider	1946157060
0	0	40613	127			111	3		SSISDB	66FD9F09-CBBA-4EAD-8703-E588A239A17D	.Net SqlClient Data Provider	1946157060
1	0	0	0			50	0		SSISDB	DCA25968-D2FA-4C97-8CED-CDE3C7A03...	.Net SqlClient Data Provider	1946157060
1	0	0	0			1	0		SSISDB	0677E1B7-E98D-4068-AE41-299822B00BB3	.Net SqlClient Data Provider	1946157060
1	0	0	0			5	0		SSISDB	274AA1DE-9C68-40E8-8A36-922461171363	.Net SqlClient Data Provider	1946157060
0	0	40613	127			98	0		SSISDB	C030262C-847D-424D-931C-A8613E2A768A	.Net SqlClient Data Provider	1946157060

Mitigation steps

Engage Geo-DR engineering team thru ICM

Classification

Root Cause: Azure SQL DB v2\GeoDR/AutoDR

How good have you found this content?

