

Troubleshoot Single2Flex migration

Last updated by | Bruno Maia | Apr 4, 2023 at 7:00 AM PDT

How to troubleshoot PostgreSQL Single2Flex migration

Contents

- [ASC](#)
- [XTS](#)
- [Kusto](#)
 - [Scenario 1:](#)
 - [Scenario 2](#)
- [Regional DMS Clusters:](#)
 - [Issues with AzureDMS connectivity](#)

ASC

First step is to go to ASC and check in migration tab.

Customer Facing Metrics: Connectivity & NetworkingInformationMigrationsInsightsResource Change HistoryAccess ControlAzure Monitor MetricsHealth

Date Time Range (UTC)

09/08/2022 at 07:04 - 09/08/2022 at 15:04 UTC

Run

List of all migrations attempted to this server

Drag a column header and drop it here to group by that column

Migration Name	Source Server	Current Status	Time
MigrationFrom		InProgress	9/8/2022 9:15:32 AM
MigrationFromZuz		Failed	9/8/2022 9:40:34 AM
MigrationFromZuz		InProgress	9/8/2022 8:52:26 AM

|<<1>>|

3 items per page

1

Get the migration name and open the view orcasbreadth-adhoccmsquery.xts

XTS

XTS View: orcasbreadth\FMS-Migration_By_Id.xts

Input the migration ID as shown below in the view FMS-Migration_By_Id.xts

XTS version 7.8.20230124.2 - SQL Azure - [Wasd-prod-centralus1-a.Wasd-prod-centralus1-a] - orcasbreadth\FMS-Migration_By_Id.xts

File Edit Recent Views View Favorites Tools Utilities Window Profiles Help Versions ? Launch XTS Help Like this view Dislike this view UTC:2023-03-15 20:29:59 Local:2023-03-15 13:29:59

Migration

Enter Migration Id a619946a-4887-4802-ac4b-1b32d9a9ec87

Migration Details: 55c4a4d4-207f-4542-bbd0-69dd2ca5b026

Migration Id	Create Time	Migration Mode	Migration Name	Migration Workflow State	Migration Status	Source Server Customer Subscription Id	Source Ser
55c4a4d4-207f-4542-bbd0-69dd2ca5b026	3/14/2023 1:48:20 PM	Offline	test-0314-9-47-AM	Completed	Failed	c2ca486a-0b04-4d5e-8e5a-fe51d9fd5e30	psql-postgres

Migration Service: 55c4a4d4-207f-4542-bbd0-69dd2ca5b026

Flexible Server Databases: psql-postgres-mm100-test

Database	Precise Time Stamp	Category	Message String
regions	3/14/2023 1:48:37 PM	MigrationService	Starting migration action sequence.
regions	3/14/2023 1:48:37 PM	PreMigrationCleanup...	Starting Killing of all active connections on db regions before dropping it
regions	3/14/2023 1:48:37 PM	PreMigrationCleanup...	Finished killing all active connections on db regions
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Starting fetching source server properties.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Finished fetching source server properties.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Starting fetching target server properties.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Finished fetching target server properties.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Source database properties: ("Name":"regions","Charset":"UTF8","LcCollate":"English_United States.1252","LcCt...
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Starting the deletion of database on target server.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Finished the deletion of database on target server.
regions	3/14/2023 1:48:37 PM	InitializeDbAction	Starting the creation of database on target server.
regions	3/14/2023 1:48:38 PM	InitializeDbAction	Target database properties: ("Name":"regions","Charset":"UTF8","LcCollate":"en_US.utf8","LcType":"en_US.ut...
regions	3/14/2023 1:48:38 PM	InitializeDbAction	Finished the creation of database on target server.
regions	3/14/2023 1:48:38 PM	InstallExtensionsAction	4 extension(s) installed on the source database: 'pg_catalog', 'pg_stat_statements', 'pg_buffercache', 'uuid-osp'
regions	3/14/2023 1:48:38 PM	InstallExtensionsAction	1 extension(s) already installed on the target database: 'pg_catalog'
regions	3/14/2023 1:48:38 PM	InstallExtensionsAction	Starting the creation of extension 'pg_stat_statements'
regions	3/14/2023 1:48:38 PM	InstallExtensionsAction	Finished the creation of extension 'pg_stat_statements'

Database: regions

Migration Json | Migration Json [Raw] | RP-ARM: 55c4a4d4-207f-4542-bbd0-69dd2ca... | RP-State Machine: 4e81d9c5-32e0-442b-860... | Migration Service: 55c4a4d4-207f-4542-bbd0... | pgcopydb Logs: 55c4a4d4-207f-4542-bbd0-6...

Migration Details: 55c4a4d4-207f-4542-bbd0-69dd2ca5b026 rows: 1, selected rows: 1, selected cells: 14

check the tabs

- a) Migration Json
- b) Migration Json (Raw)
- c) RP-ARM - <MigrationID>
- d) RP-StateMachine
- e) Migration Service: <MigrationID>

Run any of the below queries:

- Select * from dbo.entity_migration where migration_name like '%migrationname%'
- Select * from dbo.entity_migration where target_server_name='Flexibleservername'

sterling\Favorites and Links.xtsorcasbreadth\orcasbreadth-adhoccmsquery.xts

OrcasBreadth CMS query

Query Text

Select * from dbo.entity_migration where migration_name = 'MigrationFromZuzuSingleServerRetry3'

OK

TDS Query to OrcasBreadth metadata store

id	migration_details_internal_as_json
70388d08-41f8-450	b{"MigrationId": "70388d08-41f8-4508-827", "MigrationName": "MigrationFrom:", "CurrentStatus": {"State": "Failed", "Error": "Data migration could not be started fo

Retrieve the JSON and use a tool that supports JSON format.

JSON Viewer

Sample

2 Tab Space

Viewer →
Minify / Compact →
Validate →

```
{
  "id": "70388d08-41f8-450",
  "migration_details_internal_as_json": {
    "MigrationId": "70388d08-41f8-4508-827",
    "MigrationName": "MigrationFrom:",
    "CurrentStatus": {
      "State": "Failed",
      "Error": "Data migration could not be started fo
    }
  }
}
```

#Get the DMSname.

#Go to kusto and open AzureDMS connection

Kusto

Edit connection

Cloud settings

Public cloud (windows.net)

Cluster connection (e.g. https://someservice.kusto.windows.net)

https://azuredms.kusto.windows.net

Connection Alias (e.g. SomeService)

Azuredms

Security

Client Security: AAD-Federated

Advanced: Connection String (Ctrl+F9)

OK

Cancel

Run:

GetServiceByNameOrWorkerId("%dms name%")

If that doesn't work try:

GetServiceByName("%dms name%")

GetServiceByNameOrWorkerId("dms-a736418f5a70")

WorkerId	CreatedDate	Environment	DeploymentUnit	SubscriptionId	ResourceGroup	ServiceName	SkuName
5dnr7ip6dbjqdjd5urr4t28	2022-09-08 09:15:37.5828140	Prod	ProdDmsRp1WEu	#####-55fd-41d4-b943-a6ae2ebad5aa	####-dev	dms-a736418f5a70	Prem

From the results get the worker id and use on the following query:

GetScenariosRunOnAgent(ago(10d),"%workerid from above query%")

GetScenariosRunOnAgent(ago(10d), "5dnr7ip6dbjqdjdcsurr4t28")

StartTime	Duration	TaskId	MessageId	ScenarioId
2022-09-08 09:27:32.4760175	00:00:12.3088860	d247f43e-ab11-47fe-ba19-855e89bc4d4a	6784cce102e642d8945e620ed200788b	ConnectToSource.PostgreSql.Sync
2022-09-08 09:27:47.7399613	00:00:01.3815302	a6655b78-5575-4f3d-8944-35b67f06326f	375fbabb78f24da8a59a35ec4731be9f	ConnectToTarget.AzureDbForPostgreSql.S
2022-09-08 09:27:51.1206207		cd874608-4d67-4037-ab5b-74c268f0d2d0	88f294a1d8d247b69e953bb4d8c78990	Migrate.PostgreSql.AzureDbForPostgreSq

From this you get the scenario task ID use the task id in below query

Scenario 1:

GetE2EPGV2MigrationEvents("%task id from above query%")

GetE2EPGV2MigrationEvents("cd874608-4d67-4037-ab5b-74c268f0d2d0") Results

StartTimeWindow	EndTimeWindow	ScenarioTaskId	DatabaseName	Level	# Faults	# Msg Errors
2022-09-08 09:27:22.1882042	2022-09-13 11:21:40.9287499	cd874608-4d67-4037-ab5b-74c268f0d2d0	dl6VsyPPk0goeLzFdg/VxDJ1X1JRmBX3UuxBE6tg+RI=		0	1
2022-09-08 09:27:22.1882042	2022-09-13 11:21:40.9287499	cd874608-4d67-4037-ab5b-74c268f0d2d0	j8H42tE9BEfRvIOXk41zL0A16YuLpuMhx6qO2Llu7Ng=		0	1

Scenario Faults

Click on Message Errors tab in the output window to see the exact error

MessageId	ResExcTimestamp	MessageErrors
88f294a1d8d247b69e953bb4d8c78990	2022-09-08 09:28:04.6150102	PGv2RestoreErrorException at Microsoft.DataMigration.PostgreSql.Commands.PostgreSqlRestore. <Restore>d__1.MoveNext -> (DumpRestoreAggregateException[0x87EF0015: 1] at Microsoft.DataMigration.PostgreSql.Commands.ProcessExecutor.ErrorHandlin

--	--	--

error message 'error: could not execute query: ERROR: extension ""hypopg"" is not allow-listed for ""azure_pg_admin"" users in Azure Database for PostgreSQL'.

In this case the user did not allowed all the extensions.

Scenario 2

If it fails during **WaitingForDataMigrationDMSTaskToComplete** you can also use the following query to check

























the dump and restore logs:

```
GetPGOnlineMigrationLogEvents
| where ScenarioTaskId == 'cd874608-4d67-4037-ab5b-74c268f0d2d0'
| project PreciseTimeStamp,Message
| sort by PreciseTimeStamp asc
```

This query runs on regional DMS clusters, check clusters bellow:

PreciseTimeStamp	Message
2022-09-08 09:28:04.0506235	pg_restore: finished item 4522 SEQUENCE SET RideType_code_seq
2022-09-08 09:28:04.0507079	pg_restore: launching item 4524 SEQUENCE SET Route_routeId_seq
2022-09-08 09:28:04.0508374	pg_restore: finished item 4521 SEQUENCE SET RelatedRide_id_seq
2022-09-08 09:28:04.0509313	pg_restore:pg_restore: executing SEQUENCE SET Route_routeId_seq
2022-09-08 09:28:04.0510296	launching item 4525 SEQUENCE SET Train_id_seq
2022-09-08 09:28:04.0511125	pg_restore: finished item 4520 SEQUENCE SET PublicTransportOperator_code_seq
2022-09-08 09:28:04.0511933	pg_restore: executing SEQUENCE SET Train_id_seq
2022-09-08 09:28:04.0529931	pg_restore: finished item 4523 SEQUENCE SET Ride_id_seq
2022-09-08 09:28:04.0563031	pg_restore: finished item 4525 SEQUENCE SET Train_id_seq
2022-09-08 09:28:04.0564222	pg_restore: finished item 4524 SEQUENCE SET Route_routeId_seq
2022-09-08 09:28:04.0988798	pg_restore: finished item 4303 CONSTRAINT BusStation PK_a977e5c26e00f07e0ac51f
2022-09-08 09:28:04.0990795	pg_restore: finished main parallel loop
2022-09-08 09:28:04.1601250	pg_restore: warning: errors ignored on restore: 3

Regional DMS Clusters:

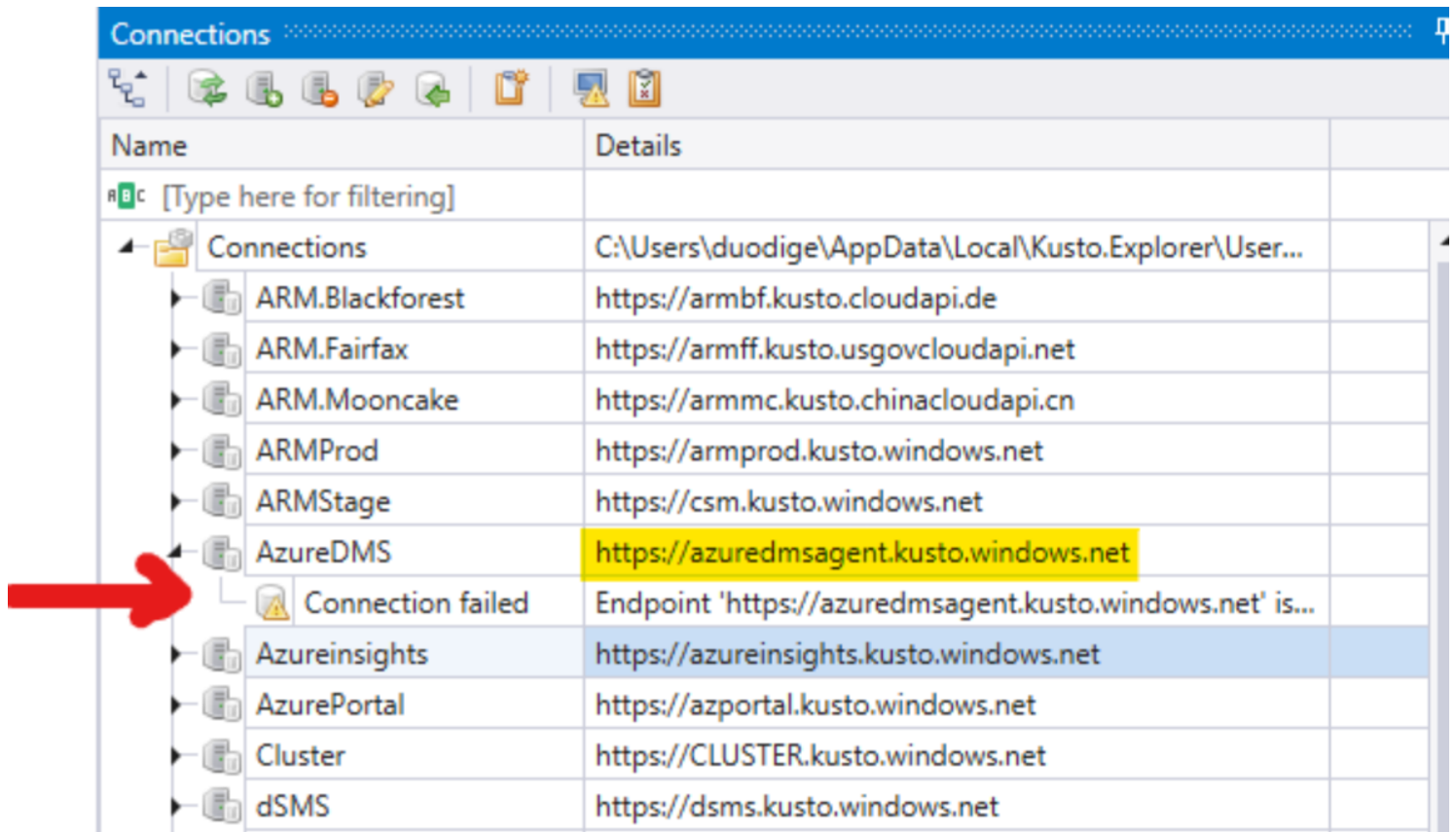
<https://azuredmswus2.westus2.kusto.windows.net> 
<https://azuredmsukw.ukwest.kusto.windows.net> 
<https://azuredmsuks.uksouth.kusto.windows.net> 
<https://azuredmsscus.southcentralus.kusto.windows.net> 
<https://azuredmscind.centralindia.kusto.windows.net> 
<https://azuredmscane.canadaeast.kusto.windows.net> 
<https://azuredmsbrazilsouth.brazilsouth.kusto.windows.net> 
<https://azuredmsaue.australiaeast.kusto.windows.net:443> 
<https://azuredmsjapane.japaneast.kusto.windows.net:443> 
<https://azuredmsjapanw.japanwest.kusto.windows.net:443> 
<https://azuredmsseasia.southeastasia.kusto.windows.net:443> 
<https://azuredmseus2.kusto.windows.net>  (For EastUS2 and EastUS2EUAP)
<https://azuredmsause.kusto.windows.net> 
<https://azuredmswus.kusto.windows.net>  (For WestUS and WestCentralUS)
<https://azuredmscanc.kusto.windows.net> 
<https://azuredmscus.kusto.windows.net> 
<https://azuredmseasia.kusto.windows.net> 
<https://azuredmseus.kusto.windows.net> 
<https://azuredmsncus.kusto.windows.net> 
<https://azuredmsneu.kusto.windows.net> 
<https://azuredmssind.kusto.windows.net> 
<https://azuredmsweu.kusto.windows.net>  WestEurope
<https://azuredmswind.kusto.windows.net> 
<https://azuredmskoreac.kusto.windows.net> 

<https://azuredmskoreas.kusto.windows.net>

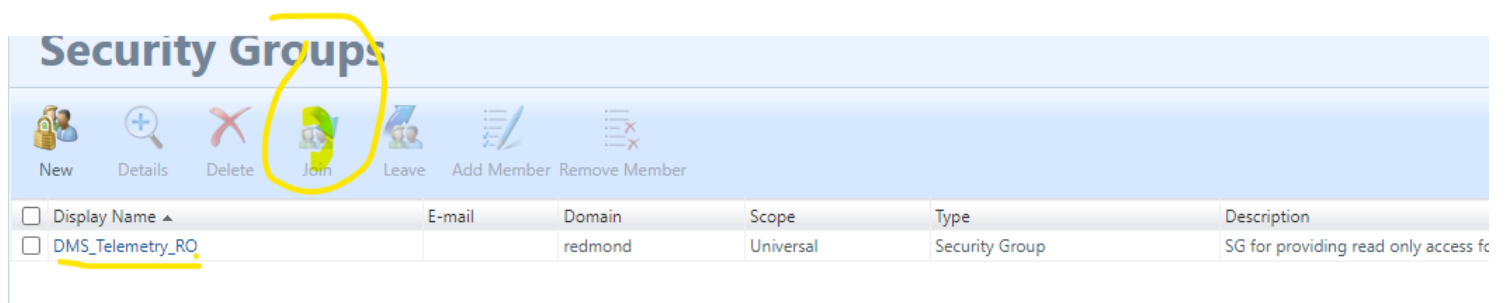
<https://AzureDmsFranceC.kusto.windows.net> (France Central)

Issues with AzureDMS connectivity

If you face the following error in Kusto:



You will need to request access to DMS_Telemetry_RO security group in [Microsoft Identity manager](#)



Scenario 3:

In some cases, if you did not get any result from `GetServiceByNameOrWorkerId("%dms name%")` or `GetServiceByName("%dms name%")`, most probably the migration did not start and there was a failure at DMS creation (creation did not start), to track if there is any issue at DMS creation you can follow the below:

```
let starttime = datetime(yyyy-mm-dd hh:mm:ss);
```

```

let endtime = datetime(yyyy-mm-dd hh:mm:ss);

cluster('armprod.kusto.windows.net').database('ARMProd').Traces
| where TIMESTAMP between (starttime .. endtime)

// | where isnotempty( exception) and exception contains "Not Found"

//| where correlationId =~ "46659c05-4f82-4b45-bf4b-97cb0132bb53"

| where subscriptionId == "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"

| where exception !contains "<null>" and exception !contains "Cannot access a disposed object"

| project TIMESTAMP,message,exception

```

exception	<p>Microsoft.WindowsAzure.ResourceStack.Common.Core.ErrorResponses.ErrorMessageException: The Resource 'Microsoft.DataMigration/services/dms-e0f2b0f93063' under resource group 'PostgresMigration' was not found. For more details please go to https://aka.ms/ARMResourceNotFound. --- End of stack trace from previous location where exception was thrown --- at System.Runtime.ExceptionServices.ExceptionDispatchInfo.Throw() at System.Runtime.CompilerServices.TaskAwaiter.HandleNonSuccessAndDebuggerNotification(Task task) at Microsoft.WindowsAzure.ResourceStack.Frontdoor.Web.Controllers.ResourceController.<GetResource>d_37.MoveNext() in X:\bt\1211920\repo\src\frontdoor\Roles\Frontdoor.Web\Controllers\ResourceController.cs:line 222 --- End of stack trace from previous location where exception was thrown --- at System.Runtime.ExceptionServices.ExceptionDispatchInfo.Throw() at Microsoft.WindowsAzure.ResourceStack.Common.Core.ErrorResponses.ErrorMessageException: The provided location 'westus3' is not available for resource type 'Microsoft.DataMigration/services'. List of available regions for the resource type is 'westcentralus,brazilsouth,westeurope,australiaeast'. --- End of stack trace from previous location where exception was thrown --- at System.Runtime.ExceptionServices.ExceptionDispatchInfo.Throw() at Microsoft.WindowsAzure.ResourceStack.Frontdoor.Web.Common.Validation.ResourceTypeLocationAvailable(String location, ResourceTypeRegistration[] registrations) in X:\bt\1211920\repo\src\frontdoor\Roles\Frontdoor.Web\Common\Validation.cs:line 0 at Microsoft.WindowsAzure.ResourceStack.Frontdoor.Web.Controllers.ResourceController.<PutResource>d_40.MoveNext() in X:\bt\1211920\repo\src\frontdoor\Roles\Frontdoor.Web\Controllers\ResourceController.cs:line 429 --- End of stack trace from previous location where exception was thrown --- at System.Runtime.ExceptionServices.ExceptionDispatchInfo.Throw() at System.Runtime.CompilerServices.TaskAwaiter.HandleNonSuccessAndDebuggerNotification(Task task) at Microsoft.WindowsAzure.ResourceStack.Frontdoor.Web.Handlers.ResourceManagementHandler.<ProcessResourceRequest>d_16.MoveNext() in X:\bt\1211920\repo\src\frontdoor\Roles\Frontdoor.Web\Handlers\ResourceManagementHandler.cs:line 299</p>
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How good have you found this content?

