# **Geo-restore**

Last updated by | Hamza Agel | Jan 10, 2023 at 11:37 PM PST

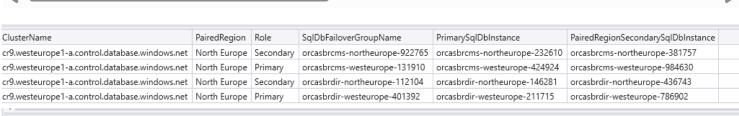
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### **Geo-Backup Checks and Investigation Tips**

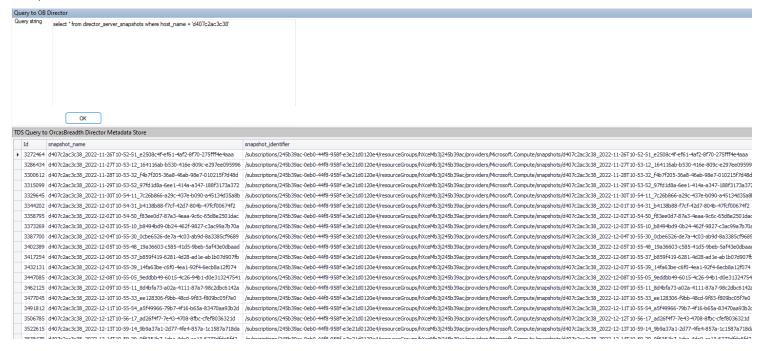
1. Check if SQL DB failover group (FOG) is setup. If below

// SQL DB Failover group primary and replica setup for Orcasbreadth CMS and Director DB
MonGeoDRFailoverGroups
| where PreciseTimeStamp > ago(4h)
| where failover\_group\_name contains "orc" and failover\_group\_name contains "br"
| summarize count(), min(TIMESTAMP), max(TIMESTAMP) by SqlDbFailoverGroupName = failover\_group\_name, PrimarySq
| project ClusterName, PairedRegion, Role=role, SqlDbFailoverGroupName, PrimarySqlDbInstance, PairedRegionSeco
| order by ClusterName



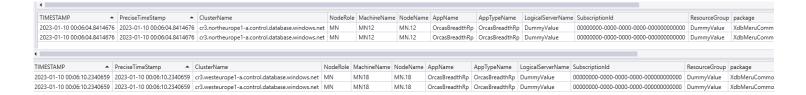
ClusterName	PairedRegion	Role	SqlDbFailoverGroupName	PrimarySqlDbInstance	PairedRegionSecondarySqlDblnstance
cr3.northeurope1-a.control.database.windows.net	West Europe	Primary	orcasbrcms-northeurope-922765	orcasbrcms-northeurope-381757	orcasbrcms-northeurope-232610
cr3.northeurope1-a.control.database.windows.net	West Europe	Secondary	orcasbrcms-westeurope-131910	orcasbrcms-westeurope-984630	orcasbrcms-westeurope-424924
cr3.northeurope1-a.control.database.windows.net	West Europe	Primary	orcasbrdir-northeurope-112104	orcasbrdir-northeurope-436743	orcasbrdir-northeurope-146281
cr3.northeurope1-a.control.database.windows.net	West Europe	Secondary	orcasbrdir-westeurope-401392	orcasbrdir-westeurope-786902	orcasbrdir-westeurope-211715

2. Check if SQL DB is replicating to paired region - run below in paired region using orcasbreadth\orcasbreadth director-adhocbackingstorequery.xts



3. Kusto query to check if one RP is sending its CMS and Director DB's secondary instance connection strings to the paired RP periodically

```
MonOrcasBreadthRp
| where AppName== "OrcasBreadthRp"
| where TIMESTAMP> ago(1h)
| where event startswith "orcasbreadth_utility_db_password_update_on_paired_rp"
```



## **Geo-Restore Checks and Investigation Tips**

- 1. *GeoBackupsNotAvailable*: Unable to geo-restore server pgflexservername as its geo-backups are not available yet.
- 1.1 Check if source director GeoSnapshotCopyActor copied the snapshot successfully in the BCDR sub in the paired region.

```
let end_time = now();
let start_time = end_time - 7d;
let myServerName = '<server-name>';
MonOBDirectorV2ActorEvents
| where PreciseTimeStamp between (start_time..end_time)
| where ActorName == "GeoSnapshotCopyActor"
| where ServerName =~ myServerName or LogicalServerName =~ myServerName
| where Message contains "completionPercent"
| order by PreciseTimeStamp
```

### completionPercent as 100

,			•
ionName	originalEventTimestamp	Message	
		"diskSizeGB": 32,	4
ectorActorSession	2023-01-09 12:33:44.4522253	ProcessCheckSnapshotCopyCompleteState: GET on deaa29cc3776_2023-01-09T11-49-20_aa1807d2-3454-4128-88c6-31c3d1aa0fe7-backup returned provisioningState as Succeeded with completionPercent as 100	_
ectorActorSession	2023-01-09 12:33:44.4529776	ProcessCheckSnapshotCopyCompleteState: GET on deaa29cc3776_2023-01-09T11-49-20_aa1807d2-3454-4128-88c6-31c3d1aa0fe7-backup returned provisioningState as Succeeded with completionPercent as 100 Snapshot copy completed -	- st
ectorActorSession	2023-01-09 12:29:00.2770971	[properties and { "osType", "Linux", "stype", "Linux", "creation/Data", { "creation/Data", { "creation/Data", { "creation/Data", " "sourceResourcedit", "subscriptions/eb0bc9de-c8ed-4c06-89da-895c99b003e0/resourceGroups/ohkUXvrfeb0bc9de/providers/Microsoft.Compute/snapshots/deaa29cc3f76_2023-01-09T11-49-20_aa1807d2-3454-4128-88c6-31c3d1aa0fe7" "sourceUniqueId", "78b57b43-f9d3-4a6a-8b74-56f66cf19e11"  1, "diskSizeGB", 32,	;
ectorActorSession	2023-01-09 12:29:00.3552307	ProcessCheckSnapshotCopyCompleteState: GET on deaa29cc3f76_2023-01-09T11-49-20_aa1807d2-3454-4128-88c6-31c3d1aa0fe7-backup returned provisioningState as Succeeded with completionPercent as 99	
ectorActorSession	2023-01-09 12:29:00.3560661	ProcessCheckSnapshotCopyCompleteState: GET on deaa29cc3f76_2023-01-09T11-49-20_aa1807d2-3454-4128-88c6-31c3d1aa0fe7-backup returned provisioningState as Succeeded with completionPercent as 99 Snapshot copy isn't complete	e - 🔻

If snapshots are created correctly in BCDR-tagged resource group, it's possible paired RP is not able to connect to secondary Director DB. Refresh secondary connection strings in paired RP by running below CAS in source region's DSConsole: Set-OrcasBreadthMetadaStoresCnxnStringsInPairedRP and ask the customer to retry after some time (15mins), if it is not working, you can file an ICM for this.

1.2 If GeoSnapshotCopyActor reports error in copying snapshots across-region, check DiskRP telemetry to see what happened to cross-region copy calls to Disk RP here: <a href="https://disks.kusto.windows.net/Disks">https://disks.kusto.windows.net/Disks</a> ☑ and file an ICM to investigate and resolve the issue.

```
DiskManagerApiQoSEvent
| where PreciseTimeStamp > ago(4h)
| where MonitoringApplication contains "europe"
| where operationName == "Snapshots.ResourceOperation.PUT"
| where resourceName contains "<name of snapshot that failed to be copied>"
From above query for any failures, use operationId in query below to determine detailed sequence on the disk R
DiskManagerContextActivityEvent
| where PreciseTimeStamp > ago(2h)
| where activityId == "<operation ID from above query>"
```

### How good have you found this content?

