

How to check why the node is restarted

Last updated by | Hamza Aqel | Mar 8, 2023 at 2:37 AM PST

Sometimes, server restart/failover could be caused by node level or even cluster level exceptions. You can use the below query to check if other servers on this node or tenant ring is impacted.

Taken example of below case, a node on this tenant was disabled , so customer's servers on this cluster were failover and auto restart on another node.

node_name	node_status	count_
DB.72	Disabled	2

```
MonClusterLoad
| where TIMESTAMP > ago(2d)
| where event=='node_state_report'
| where ClusterName == "tr15.australiaeast1-a.worker.database.windows.net"
| where node_name == 'DB.34'
| project TIMESTAMP , node_name , node_status, upgrade_domain , health_state,node_type,node_up_time, fault_dom
//| where node_status != "Up"

// node down
MonClusterLoad
| where event == 'node_state_report'
| where ClusterName startswith ""
| where node_name == ""
| extend status = iff(node_status == 'Up', 1, 0)
| project TIMESTAMP, status
| render scatterchart
```

Once observed that the node is restarted, please refer to below to further check the cause of node restart

- [Platform Maintenance](#)
- [Node Repairs](#)
- Infrastructure Issue
 1. Get tenant id from SFE, shown as below

Cluster wasd-prod-indiawest1-a-tr8

Cluster Properties	
Health State	Warning
Provider	SQL Config Store Provider
Connection endpoints	tr8.indiawest1-a.worker.database.windows.net:9003
Credentials	ClaimsCreds(Interactive, Url: wasd-prod-indiawest1-a-tr8)
FabricClusterName	wasd-prod-indiawest1-a-tr8
ClientCertificateName	deployment.database.windows.net
Package type	Worker.Gen5.VNET.Public
Properties	ProductFamily=Orcas, Tenant
JitAccessEndpoint	https://jitaccess.security.core.windows.net
ControlClusterAddress	indiawest1-a.control.database.windows.net
FirstHostedServiceTenantId	762a2d8b848b4d50b90b1eb5d760204c
IsSqlCluster	True
Data-center	bm1
RegionallImageStoreAccountName	wasd2prodinwe1aris0
Cluster Address	tr8.indiawest1-a.worker.database.windows.net
HostedServiceSubscriptionId	18d37bfd-7771-48a7-a676-7e3843649a3c
FirstHostedServiceFC	bm1prdapp09
ClusterType	Production
MdsAccount Moniker	ProdInWe1aTR8
ClusterShortName	indiawest1-a
Cluster state	Live
MdsEndpoint	https://production.diagnostics.monitoring.core.windows.net
Cluster address(legacy)	wasd-prod-indiawest1-a-tr8.cloudapp.net:9000
ClusterName	wasd-prod-indiawest1-a
FixedMaintenanceWindow	
FabricClusterId	tr8
AzureHostedServiceZone	cloudapp.net
Cluster address	tr8.indiawest1-a.worker.database.windows.net:9003
Fabric controller	bm1prdapp09
IsPaaSv2	False
ClusterEnvironmentName	Production
Storage account	wasd2prodinwe1atr8
ProtectedRing	False
Tenant id	762a2d8b848b4d50b90b1eb5d760204c
Subscription id	18d37bfd-7771-48a7-a676-7e3843649a3c
MDSNamespace	WASD2Prod

NodeView

Node	Status	UD
DB.0	Up	UD 0
DB.1	Up	UD 1
DB.2	Up	UD 2
DB.3	Up	UD 3
DB.4	Up	UD 4
DB.5	Up	UD 5
DB.6	Up	UD 6
DB.7	Up	UD 7
DB.8	Up	UD 8
DB.9	Up	UD 9
DB.10	Up	UD 1
DB.11	Up	UD 2
DB.12	Up	UD 3
DB.13	Up	UD 4
DB.14	Up	UD 5
DB.15	Up	UD 6
DB.16	Up	UD 7
DB.17	Up	UD 8
DB.18	Up	UD 9
DB.19	Up	UD 0
DB.20	Up	UD 2
DB.21	Up	UD 3
DB.22	Up	UD 4
DB.23	Up	UD 5
DB.24	Up	UD 6
DB.25	Up	UD 7
DB.26	Up	UD 8
DB.27	Up	UD 9
DB.28	Up	UD 0
DB.29	Up	UD 1

2. Run below KQL to get container ID

PreciseTimeStamp	Tenant	nodeId	containerId	role
2022-07-06 00:08:31.2101025	BM1PrdApp09	ee7ebf64-24a9-41c2-a691-50ff31533697	bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1	DB_
2022-07-06 01:10:41.8977419	BM1PrdApp09	ee7ebf64-24a9-41c2-a691-50ff31533697	bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1	DB_
2022-07-06 01:33:22.2419737	BM1PrdApp09	ee7ebf64-24a9-41c2-a691-50ff31533697	bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1	DB_

```
cluster("Azurecm").database('AzureCM').LogContainerSnapshot
| where PreciseTimeStamp between(datetime(2022-07-06 00:00:00.0000000)..datetime(2022-07-06 02:05:00
| where tenantName =~ "762a2d8b848b4d50b90b1eb5d760204c" and roleInstanceName =~ "DB_IN_15"
| project PreciseTimeStamp, Tenant, nodeId, containerId, roleInstanceName, tenantName
```

3. Fill the issue time window and container ID in <https://netvma.azure.net>

NetVMA Home Phynet Region/DC Health Customer Health Help

Start Time (UTC) 07/06/2022 0 : 55 Search Term bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1

End Time (UTC) 07/06/2022 1 : 5

Submit

4. Check if any hardware failure shown as below

NetVMA Home Phynet Region/DC Health Customer Health Help

Start Time (UTC) 07/06/2022 0 : 55 Search Term bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1

End Time (UTC) 07/06/2022 1 : 5

Submit

Hide Search Form Copy URL Time Range 2022-07-06 01:00 UTC to 2022-07-06 01:05 UTC. Search Term ContainerId: bb30c2d6-9e45-44b2-bfee-39c0a44a7bc1, Cloud: Public

PHYSICAL NETWORK PATH TO VIAN - View in TopoService

Node 100.77.204.24 TOR BOM01-0101-0402-2070 T1 SET (Cluster) View in Controls T2 SET (Data Center) View in Controls T3 RING (Region) View in Controls WAN/SD-WAN View in Controls

SUBSCRIPTION 18437050-7771-48a7-4876-7a3843649a3c

TENANT 762a20804804d50b0b1eb5d760204c

DATA CENTER BOM01 (india-west)

CLUSTER BM1PRDAPP03

TOR A BOM01-0101-0402-2070

Node 100.77.204.24

Cluster Loopback Availability

Host-TOR PingMesh TOR Availability - View in Kusto

Device Health - View in Kusto

Host-TOR PingMesh Node Availability - View in Kusto

Host Health - View in Kusto

Node Count 24 (View Link)

VM Count 56 (View Link)

Subscription Count 25 (View Link)

Tenant Count 34 (View Link)

Container Count 55 (View Link)

Time Range: 07/06/2022 01:00:00 - 07/06/2022 01:05:00

Device Name: BOM01-0101-0402-2070

Failure Reasons:

TimeStamp	Health Category	Health	Persistence th	Failure Reason	Impacted
07/06/2022 01:00:00	ControlPlane	Degraded	0	BGP Session Up, With Neighbor: bon01-0101-0402-1211 : 10.10.100.40, 1, 12	
07/06/2022 01:00:00	ControlPlane	Degraded	0	BGP Session Up, With Neighbor: bon01-0101-0402-1411 : 2603.1090.200.4151:81, 1, 12	
07/06/2022 01:00:00	ControlPlane	Degraded	0	BGP Session Up, With Neighbor: bon01-0101-0402-1211 : 2603.1090.200.4141:81, 1, 12	
07/06/2022 01:00:00	DataPlane	Unhealthy	0	IPv6SNMPDeviceDataPlaneDown,UpLinks to 100% neighbors lost, Status=InProduction, Planned_Maintenance - NA,70	
07/06/2022 01:00:00	DataPlane	Unhealthy	0	IPv6SNMPDeviceDataPlaneDown,UpLinks to 100% neighbors lost, Status=InProduction, Planned_Maintenance - NA,70	
07/06/2022 01:00:00	HostSw	Unhealthy	0	Device Reload - Planned_Maintenance -> NA Status=InProduction, 1, 70	
07/06/2022 01:00:00	ControlPlane	Degraded	0	BGP Session Up, With Neighbor: bon01-0101-0402-1611 : 10.10.100.40, 1, 12	

If you have any doubts when following this page, please reach out to *xixia* for clarification and wiki/TSG improvement.