

How to check a Single Server failover from WinFab level

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

This TSG is used to check when WinFab received the failover request and started to do failover. This could be useful to see if long failover was caused by delay in WinFab.

For example, like the sandbox log below from a PostgreSQL Single Server, there were 20 minutes gap between server being terminating and failover started.

```
originalEventTimestamp process_id text
2022-04-05 19:36:00.5141443 35108 CDbApp::Terminate: Terminating process...
2022-04-05 19:59:56.2410886 35108 OrcasqlInstanceProvider: FabricChangeRole (currentRole = Primary, newRole =
```



To further investigate if the 20 minutes delay was caused by WinFab, you can run below query to get an ID and then use the ID to run the 2nd query to see when WinFab received the request. In this example, the request received by WinFab was 20 minutes later, which proved that the delay was not caused by WinFab.

Id	TaskName	EventType	Text
7d316c75-6fc8-4dc3-8415-c48b0761b6fb	CRM	Operation	Operation Details: Phase: ClientApiMovePrimary Action: MovePrimary Service: fabric:/Worker.PAL.MySQL/bbe5869879eb/MySQL.Server.PAL/bbe5869879eb DecisionId: e86fd38b-7652-4d51-8afa-e80a2b8bae23 PartitionId: 7d316c75-6fc8-4dc3-8415-c48b0761b6fb SourceNode: cf0043e763593e4dc0d1243273f8f105 TargetNode: cf102aa3178ef1b89e20204fff34612e
7d316c75-6fc8-4dc3-8415-c48b0761b6fb	CRM	Operation	Operation Details: Phase: ClientApiMovePrimary Action: MovePrimary Service: fabric:/Worker.PAL.MySQL/bbe5869879eb/MySQL.Server.PAL/bbe5869879eb
	CRM	OperationOperational	EventName: Operation Category: StateTransition EventInstanceId: 6191d8c5-7922-4f13-b5ee-8db553 Phase: MovePrimary Action: ClientApiMovePrimary Service: fabric:/Worker.PAL.MySQL/bbe5869879eb/MySQL.Server.PAL/bbe5869879eb DecisionId: e86fd38b-7652-4d51-8afa-e80a2b8bae23 SourceNode: cf0043e763593e4dc0d1243273f8f105 TargetNode: cf102aa3178ef1b89e20204fff34612e MoveCost: 1

```
cluster('sqlazurebr2.kustomfa.windows.net').database('sqlazure1').
WinFabLogs
| where TIMESTAMP >= datetime(2022-04-05 19:00:54.7464349) and TIMESTAMP <= datetime(2022-04-06 01:20)
| where TaskName == "CRM"
| where Text contains "bbe5869879eb" //App Name, which can get from ASC
| project ETWTimestamp, ClusterName, NodeName, Id, TaskName, EventType, Text=trim("((\r)?(\n)?)*", Text)
| summarize by Id, TaskName, EventType, Text
```

ETWTimestamp	NodeName	TaskName	EventType	Text
2022-04-05 19:57:11.2330000	DB.0	CRM	Operation	Operation Details: Phase: ClientApiMovePrimary Action: MovePrimary Service: fabric:/Worker.PAL.MySQL/bbe5869879eb/MySQL.Server.PAL/bbe5869879eb DecisionId: e86fd38b-7652-4d51-8afa-e80a2b8bae23 PartitionId: 7d316c75-6fc8-4dc3-8415-c48b0761b6fb SourceNode: cf0043e763593e4dc0d1243273f8f105 TargetNode: cf102aa3178ef1b89e20204fff34612e
2022-04-05 19:57:11.2330000	DB.0	CRM	Operation	Operation Details: Phase: ClientApiMovePrimary Action: MovePrimary Service: fabric:/Worker.PAL.MySQL/bbe5869879eb/MySQL.Server.PAL/bbe5869879eb
2022-04-05 19:57:32.9950000	DB.0	Api	Finish	Finish IReplicator.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:1328831118285487720
2022-04-05 19:57:32.9950000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:57:41.3070000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:57:51.4010000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:58:01.4950000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:58:11.5880000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:58:21.1200000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111
2022-04-05 19:58:31.1930000	DB.0	Api	Finish	Finish IStatefulServiceReplica.ChangeRole(S) on node cf0043e763593e4dc0d1243273f8f105:132883111

```
cluster('sqlazurebr2.kustomfa.windows.net').database('sqlazure1').
WinFabLogs
//| where TIMESTAMP >= datetime(2022-04-05 19:00:54.7464349) and TIMESTAMP <= datetime(2022-04-06 01:20)
//| where NodeName == "DB.6"
| where Id == "7d316c75-6fc8-4dc3-8415-c48b0761b6fb" // SF Partition ID, can get from the query a
| where Text contains "Finish IReplicator.ChangeRole(" // Role Change Start
or Text contains "Finish IStatefulServiceReplica.ChangeRole(" // Role Change Finish
or Text contains "Action: AddPrimary"
or Text contains "Action: MovePrimary"
or Text contains "Action: SwapPrimarySecondary"
or TaskName == "CRM"
| project ETWTimestamp, NodeName, TaskName, EventType, Text=trim("((\r)?(\n)?)*", Text)
```

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