Error 47073 State 172 - Public endpoint is not accessible

Last updated by | Holger Linke | Mar 1, 2023 at 5:37 AM PST

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Issue

The customer is unable to connect to any Azure SQL Database inside a SQL Server. All login requests are failing with the following symptoms:

Variation 1 (older version):

Cannot connect to <u>servername.database.windows.net</u> \(\text{\textsuperscript{\textsuperscript{\textsuperscript{\text{o}}}} \).

Reason: An instance-specific error occurred while establishing a connection to SQL Server. **The public data endpoint on this server is not accessible.** To connect to this server, use the Private Endpoint from inside your virtual network. (Microsoft SQL Server, Error: 47073).

Variation 2 (newer version):

Cannot connect to <u>servername.database.windows.net</u> \(\mathrea{\text{\text{\text{\text{d}}}}\).

Reason: An instance-specific error occurred while establishing a connection to SQL Server. **Connection was denied since Deny Public Network Access is set to Yes** (https://docs.microsoft.com/azure/azure-sql/database/connectivity-settings#deny-public-network-access ②). To connect to this server, use the Private Endpoint from inside your virtual network (https://docs.microsoft.com/azure/sql-database/sql-database-private-endpoint-overview#how-to-set-up-private-link-for-azure-sql-database">https://docs.microsoft.com/azure/sql-database/sql-database/sql-database ②). (Microsoft SQL Server, Error: 47073).

Investigation / Analysis

The cause of the error is exactly what the error message describes. The public endpoint for the SQL server has been disabled and isn't accessible. The related portal options have changed over time: "Deny Public Network Access" set to "Yes"; "Public Network Access" set to "Disable". Error 47073 is not related to being blocked by the SQL server firewall.

You can confirm the issue in MonLogin by checking for error 47073 state 172:

```
let srv = "servername";
let db = "databasename";
let startTime = datetime(2023-02-28 04:00:00Z);
let endTime = datetime(2023-02-28 18:00:00Z);
let timeRange = ago(1d);
MonLogin
    | where TIMESTAMP >= startTime
    | where TIMESTAMP >= timeRange
    | where togical_server_name =~ srv
    | where database_name =~ db
    | where event == "process_login_finish"
    | where is_success == 0
// | where error == 47073
    | project TIMESTAMP, AppName, NodeName, logical_server_name, database_name, event, is_success, error, state, i
    | limit 1000
```

If the symptoms remain unclear, you can also ask the customer to run the <u>Azure SQL Connectivity Checker</u>.

Mitigation

Select the best option according to customer needs and requirements:

- On the SQL server portal under "Security -> Networking -> Public access", set "Public network access" to "Selected networks". Add a virtual network rule for the VNet where the client application is hosted.
- Keep "Public network access" at "Disabled". Go to the "Private access" tab and configure a private endpoint connection from the application VNet to the SQL server.

Public Doc Reference

Azure SQL connectivity settings ☑

Root Cause Classification

Cases resolved by this TSG should be coded to the following root cause: Azure SQL DB v2\Connectivity\Login Errors

How good have you found this content?

