

Error 18456, State 5 - Login failed for user 'X'

Last updated by | Keith Elmore | Apr 20, 2021 at 8:58 AM PDT

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Error 18456, State 5 - Login failed for user 'X'

Issue

Login failed due to invalid User ID.

If you got an **login failed for user '<token-identified principal>'** check [Error 18456, State 5 - Login failed for user '<token-identified principal>'](#)

Investigation/Analysis

In MonLogin you see error 18456 and state 5.


```
MonLogin
| where originalEventTimestamp >= datetime({StartTime}) and originalEventTimestamp <= datetime({EndTime})
| where logical_server_name == '{ServerName}'
| where database_name =~ '{DatabaseName}'
| where event == 'process_login_finish' and error == 18456 and ['state'] == 5
| limit 1000
```

Please note the following parameters in the connection string:

- **Server/Server name**
The server name, FQDN like {servername}.database.windows.net, is used to identify the control ring (externally exposed as Gateway IP Address) hosting the database. Each control ring will host a huge number of databases. In order to identify the database customer is trying to connect to, the "@servername" can be added to the end of the user name like userA@myprodserver
- **User ID / User / Uli / Login As** just mentioned above, the "@servername" can be added to the end of the user name like userA@myprodserver
This will tell the gateway to try to connect to @myprodserver and not the server specified in the Server parameter.

If the **User ID** itself has an @ sign within it, this error may happen. Example: if the User ID is jondoe@companyA, the connection attempt will be made against server **companyA** using **jondoe** as user. In

case a server named companyA exists, the connect attempt will fail with **invalid User ID**.

Please also note that, in edge cases, if customer has 2 servers (serverA and serverB) with the same credentials (user and password), by specifying *Server* = [serverA.database.windows.net](#)  and *User Id* = *user@serverB*, they will be connecting to *serverB* and not *serverA*.

Mitigation

Please review the Server and User ID used to connect, a way to resolve the issue is to add server name after login name:

jondoe@companyA@servername

Additional Info

Please note that the User ID of the *server admin* cannot be changed (only the password can be changed).

Classification

Root Cause: Azure SQL DB v2\Connectivity\Login Errors

How good have you found this content?

