Troubleshooting "Unknown" State of a Source Database as Seen in the Delphix User Interface (KBA1065)

KBA

KBA# 1065

Issue

A source database will transition to the "Unknown" state when the Delphix Engine is unable to reach that source and query the database for its state. The term source database discussed in this document refers specifically to a database which has been linked and is listed as a viable dSource from which virtual databases may later be created.

While this document is focused on a specific source database attribute, i.e. the status "Unknown", the same troubleshooting approach may be applied to virtual databases (VDBs) or a Target host listed in state "Unknown".

Troubleshooting

Paying attention to the faults listed in the User Interface may add to an understanding of possible causes and the solution.

The Environment Monitor task is responsible for testing and updating any state. Because this task runs at an interval of 300 seconds (5 minutes), any corrective activity applied to an Environment will not be reflected instantaneously in the Delphix User Interface (UI).

Alternatively, refreshing a Source Environment will avoid the need to wait for the Environment Monitor task to detect change and update the UI. An Environment refresh represents a good second step in attempting to reveal a diagnostic for this issue. A manual refresh may throw faults which should be addressed before going further.

Possible reasons for query failure are listed in the following bullet points. While this list is far from exhaustive, the intention is to cover the more common scenarios leading to this state and serve as a starting point for any investigation. Systematically ruling out the points included in this list is something which should be covered by customers as the issues are clearly external to the Delphix product:

- If public keys are being used, an invalid public key has been provided;
- Permissions associated with public key directories or files are inappropriate;
- Invalid user or password to facilitate the connection;
- Wrong view, group or privileges required for the database user to connect and query the source;
• Target host where the database source is running is down or being rebooted;
• The instance is down;
• The listener is down;
• There is a network transport issue;
• A network name resolution issue;
• The port required for the JDBC connection has been blocked.

Resolution

1. Refreshing the Source Environment AND tracking that job is the most concrete action you can take.
2. Does the job complete without error or is an error generated and what does it tell you? Following the suggested action in the error will most likely resolve the issue.
3. Is there information which could be relevant in Alerts or Faults? Was there a proceeding fault or alert to a failed action or job? Addressing these faults/alerts could rectify the issue.
4. Verifying public keys: within the UI Enter login credentials for the source database and click 'Verify Credentials'.
5. Try to connect to the Source using the user details and password which have been furnished within the Environment details.
6. Once connected to the Source, using the database user credentials, connect to the database and try to query that database state using one of the appropriate queries below.
7. Does ping against the source work from the Delphix Engine? Has the network topology changed?
8. Does the source IP address resolve to the correct name and does the name resolve to the correct IP address from the Delphix Engine?
9. Does mconnect from the Delphix Engine work against the IP address and port for the expected JDBC string?

The following table identifies the table or view queried based on the database type.

<table>
<thead>
<tr>
<th>Database</th>
<th>Query</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle</td>
<td>SELECT open_mode FROM v$database</td>
</tr>
<tr>
<td>SQL Server</td>
<td>SELECT state_desc FROM sys.databases</td>
</tr>
<tr>
<td>SAP ASE (Sybase)</td>
<td>SELECT @@servername</td>
</tr>
<tr>
<td></td>
<td>SELECT name FROM master..sysdatabases WHERE name=xyz</td>
</tr>
</tbody>
</table>