Distribution Agent job unable to connect to Distributor

Last updated by | Vitor Tomaz | Feb 24, 2023 at 3:31 AM PST

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Issue

The Transactional Replication environment on Managed Instance has been configured through the user interface in SSMS. The overall configuration looks fine, but when the Distribution Agent job tries to start the Distribution Agent, it can't connect to the Distributor. This is a Push agent running locally at the Distributor and there is no clear reason why the local connection should not be possible.

In a specific support case, the customer experienced this issue after adding a new article through the SSMS user interface, when restarting the Distribution Agent job.

Error messages reported by the job history and SQL errorlog:

> 2022-11-01 14:43:21.756 Connecting to Distributor 'yourmi.e3211bb09236.database.windows.net ⧉'
> 2022-11-01 14:43:21.897 Agent message code 20084. The process could not connect to Distributor 'yourmi.e3211bb09236.database.windows.net ⧉'.

> Login failed. The login is from an untrusted domain and cannot be used with Integrated authentication. [CLIENT: 10.11.64.4]

> SSPI handshake failed with error code 0x8009030c, state 14 while establishing a connection with integrated security; the connection has been closed. Reason: AcceptSecurityContext failed. The operating system error code indicates the cause of failure. The logon attempt failed [CLIENT: 10.11.64.7]

The error messages indicate the use of Integrated security; but changing the subscription to use SQL authentication didn't solve the issue.

Investigation / Analysis

The connections from the SQL Agent --> Distribution Agent process --> Distributor are all local within the Managed Instance. The error apparently occurs before reaching out to the subscriber.

A possible cause is that the step type on the failing distribution job is set incorrectly. Go to "Run agent" job step and confirm that "Type" is set up in accordance with the job type (Replication Transaction - Distribution for a

Distribution Agent).

The key to resolving this issue is to let the customer show you the exact steps that they have performed. If possible, let the customer (re-)create the subscription during a screen-sharing session and take note of the selected options are; especially if there are any non-default settings applied by the customer. If the customer is using a script to configure the subscription, then ask to get a copy of the script.

Similar SSPI handshake errors from on-premise SQL Servers indicate an issue with the service account of the SQL Agent job or the MSSQLSERVER service - some kind of misconfiguration. Another potential cause might be if the internal clock of the service is off by 5 seconds or more. But these are very obscure issues that very likely don't apply to Managed Instance.

Mitigation

In the support case mentioned in the "Issue" section, the customer was using an external server as the Subscriber. The server was referenced through an IP address, which was not reachable through the SSMS user interface. Instead of going through the SSMS UI, the subscription was dropped and re-created through the sp_addsubscription (Transact-SQL) ☐ and sp_addpushsubscription_agent (Transact-SQL) ☐ commands, using SQL authentication for the job login and the Subscriber login.

Here is an example of how these commands may look like:

```
exec sp_addsubscription @publication = N'publicationname',
    @subscriber = '10.11.12.13', @destination_db = N'subscriberdatabase',
    @subscription_type = N'Push', @sync_type = N'automatic', @article = N'all',
    @update_mode = N'read only', @subscriber_type = 0
GO
-- Configure the Distribution Agent
exec sp_addpushsubscription_agent @publication = N'publicationname',
    @subscriber = '10.11.12.13', @subscriber_db = N'subscriberdatabase',
    @job_login = 'TRANREPLADMIN', @job_password = '$trongPa11word',
    @subscriber_security_mode = 0, @subscriber_login = 'TRANREPLADMIN', @subscriber_password = '$trongPa11wor
    @frequency_type = 64, @frequency_interval = 0, @frequency_relative_interval = 0, @frequency_recurrence_fa
    --@frequency_type = 4, @frequency_interval = 1, @frequency_relative_interval = 0, @frequency_recurrence_f
GO
```

The strong recommendation for the customer is to ALWAYS use SQL scripts to configure Transactional Replication, either for new environments or for changing existing environments.

Open an IcM if this mitigation suggestion doesn't resolve the issue.

Public Doc Reference

- sp_addsubscription (Transact-SQL) ☐
- sp_addpushsubscription_agent (Transact-SQL) ☐

Internal reference

347395492 ☐

How good have you found this content?