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ANSWERED

Mapr-drill cannot authenticate using PLAIN mechanism

Question asked by **reedv** on Jan 9, 2018
Latest reply on Jan 12, 2018 by maprcommunity 🔊

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Having PLAIN authentication error when trying to run queries or access drill-explorer.

Have installed mapr 6.0 using the installer ⬈script and have drill installed and running on all nodes:

```
1   [mapr@mapr001 ~]$ clush -ab 'jps'
2   --------------
3   mapr001
4   --------------
5   ...
6   160245 Drillbit
7   ...
8   73244 CLDB
9   --------------
10  mapr002
11  --------------
12  ...
13  121401 Drillbit
14  ...
15  --------------
16  mapr003
17  --------------
18  134738 Drillbit
19  ...
20  .
21  .
22  .
23
```

as well as already have the query service set up (not sure what this does, just looking at the docs ⬈ (did not follow this particular instruction since the output already looked like how the docs showed they were supposed to)):

```
1   [mapr@mapr001 ~]$ maprcli cluster queryservice getconfig
2   storageplugin zookeeper                                                        znode  clusterid
3   dfs           mapr001.cluster.local:5181,mapr002.cluster.local:5181,mapr003.cluster.local:5181 /drill uceramapr.cluster.
```

This is the last instruction in the mapr docs ⬈for installing drill.

At this point, I try to inspect some log files with drill explorer using the apache drill docs ⬈ and get connection errors saying:

> ERROR [08S01] [MapR][Drill] (30) Handshake failure occurred while trying to connect to local=172.18.4.101:31010. Server message:
> [30018]Handshake Failed due to an error on the server. [Server message was: (28c8b842-d472-43bd-93c1-55f0b15bf5d0) Invalid user credentials: The
> server doesn't allow client without encryption support. Please upgrade your client or talk to your system administrator.]

Yet, in drill explorer connection dialog, I am choosing plain authentication and mapr 6.0 uses the latest version of drill (1.11):

```
1   [mapr@mapr001 ~]$ yum info mapr-drill
2   Installed Packages
3   Name        : mapr-drill
4   Arch        : noarch
5   Version     : 1.11.0.201711161142
6   ...
7   Repo        : installed
8   ...
```

Checking the drill web UI, the enabled storage plugins are cp and dfs (following the "connecting drill to datasources" docs ⧉). Have also installed the libjpam.so file in a directory /opt/pam (as per the documentation ⧉for setting up plain authentication).

I also can't connect to drill via sqlline:

```
1   [mapr@mapr002 ingest_scripts]$ /opt/mapr/drill/drill-1.11.0/bin/sqlline
2
3   OpenJDK 64-Bit Server VM warning: ignoring option MaxPermSize=512M; support was removed in 8.0
4   apache drill 1.11.0-mapr
5   "what ever the mind of man can conceive and believe, drill can query"
6
7   sqlline> !connect jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181
8   Enter username for jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181: mapr
9   Enter password for jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181: ***********
10  Error: Failure in connecting to Drill: org.apache.drill.exec.rpc.NonTransientRpcException: javax.security.sasl.SaslExcep
11
```

Yet, can successfully query "*SELECT * FROM sys.drillbits;*" from within the drill web UI.

Ultimately, my drill conf files look like:

drill-env.sh:

```
....
#-------------------- my changes
# configuring for plain authentication
# see https://drill.apache.org/docs/configuring-plain-authentication/#installing-and-configuring-plain-authentication ⧉
export DRILLBIT_JAVA_OPTS="-Djava.library.path=/opt/pam"


# enable user impersonation
# see https://maprdocs.mapr.com/52/Drill/configure_user_impersonation.html#ConfiguringUserImpersonat_31359203-d3e64 ⧉
MAPR_TICKETFILE_LOCATION=/opt/mapr/conf/mapruserticket
MAPR_IMPERSONATION_ENABLED=true

# enable mapr-hive user impersonation
# see https://maprdocs.mapr.com/52/Drill/hive_impersonation_step_1.html ⧉
# not using maprsasle_keytab since not using kerberos
export DRILL_JAVA_OPTS="$DRILL_JAVA_OPTS -Djava.security.auth.login.config=/opt/mapr/conf/mapr.login.conf -Dzookeeper.sasl.client=false -Djava.library.path=/opt/pam/"
export DRILL_JAVA_OPTS="$DRILL_JAVA_OPTS -Dmapr_sec_enabled=true -Dhadoop.login=maprsasl -
Dzookeeper.saslprovider=com.mapr.security.maprsasl.MaprSaslProvider -Dmapr.library.flatclass"
```


drill-override.conf:

```
....
# base distributed install setup
# see https://drill.apache.org/docs/installing-drill-on-the-cluster/ ⧉
drill.exec: {
  cluster-id: "mycluster-drillbits",
  zk.connect: "mapr001:5181,mapr002:5181,mapr003:5181"
}

# configuring for user impersonation
# see https://drill.apache.org/docs/configuring-user-impersonation/#configuring-impersonation-and-chaining ⧉
# also enables mapr-hive user impersonation, see https://maprdocs.mapr.com/52/Drill/hive_impersonation_step_2.html ⧉
drill.exec.impersonation: {
  enabled: true,
  max_chained_user_hops: 3
}

# configure for plain authentication
# see https://drill.apache.org/docs/configuring-plain-authentication/#installing-and-configuring-plain-authentication ⧉
```

```
drill.exec.security: {
  auth.mechanisms : ["PLAIN", "MAPRSASL"],
}
drill.exec.security.user.auth {
  enabled: true,
  packages += "org.apache.drill.exec.rpc.user.security",
  impl: "pam",
  pam_profiles: [ "sudo", "login" ]
}
```

Does any one else have any idea what other steps must be taken to get drill and drill-explorer working?

Thanks.

---

nishchai manjula M
Jan 11, 2018 4:28 PM

⭐ **Correct Answer**

🖥 reedv you were using sqlline with parameters to execute directly from command line. Once adding double quotes to for -u along with auth=maprsasl and replace --run from -f issue resolved the issue.

ex:-

sqlline -u "jdbc:drill:zk=<hostname1:5181,hostname2:5181,hostname3:5181>;auth=maprsasl" -n <user> -p <password> -f <filepath for query>

See the reply in context

No one else had this question

OUTCOMES

Helpful(2)

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Last modified on Jan 11, 2018 12:55 PM

Tags: drill   authentication   drill explorer   documentation to improve   mapr 6.0   mapr-db drill   drill 1.11

Categories: Analytics   NoSQL and Search

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5 Replies

bbevens M
Jan 11, 2018 11:58 AM

When you install MapR and components, such as Drill through the MapR Installer, the cluster and components are secured automatically (unless you unchecked the use MapR default security option), which is why you may be seeing some errors referring to credentials. See https://maprdocs.mapr.com/home/SecurityGuide/BuiltIn.html ⇗ and https://maprdocs.mapr.com/home/Drill/securing_drill.html ⇗.

As of Drill 1.11 and MapR 6.0, when you install with the default security settings enabled, the Drill client (machine from which you connect to the Drill cluster) must also have Drill 1.11 installed. If you have an earlier version of Drill or Drill is not installed on the client, you will not be able to connect to the Drill cluster, which will result in an error, such as the one you experienced: *The server doesn't allow client without encryption support.*

The Query Service is for operational queries, whereas Drill is for analytical queries. See https://maprdocs.mapr.com/home/MapR-DB/Indexes/Indexes.html ⧉ for information about OJAI and Drill queries.

To use Drill Explorer, you must install the Drill ODBC Driver. See https://maprdocs.mapr.com/home/Drill/drill_odbc_connector.html ⧉. This page has a link to the driver documentation which includes instructions for using Drill Explorer.

By default, the dfs storage plugin is configured to connect to MapR-FS and MapR-DB. However, you may want to create workspaces where your data resides. See https://drill.apache.org/docs/workspaces/ ⧉. If you want to configure a storage plugin for another data source, such as Hive, see https://maprdocs.mapr.com/home/Drill/connect_drill_to_data_sources.html ⧉ and https://maprdocs.mapr.com/home/Drill/configure_hive_storage_plugin.html ⧉.

Based on the information you provided, please try the following suggestions to resolve your issue:

- Install Drill 1.11 on the client machine. If you installed MapR 6.0 and Drill 1.11 with the Enable MapR Secure Cluster option selected, make sure this option is selected when you install Drill 1.11 on the client machine. See https://maprdocs.mapr.com/home/MapRInstaller.html ⧉.
- Restart Drill on each node by running the following command:

  $ maprcli node services -name drill-bits -action restart -nodes <node host names separated by a space>
- Install and configure the Drill ODBC Driver and then follow the instructions for running Drill Explorer. See https://maprdocs.mapr.com/home/Drill/drill_odbc_connector.html ⧉. This page has a link to the driver download and documentation, which includes installation and configuration instructions, as well as instruction for using Drill Explorer. If your cluster and Drill are using the default security applied during installation, you can select MapR-SASL authentication.
- To connect from sqlline, try the following connection string:

  /opt/mapr/drill/drill-1.11.0/bin/sqlline -u "jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181;auth=maprsasl"

Hope these suggestions help resolve your issue. If not, please let us know.

2 people found this helpful

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⚙ **reedv**
@ bbevens on Jan 11, 2018 4:37 PM

Thanks for providing all this information in one place. The problem has been solved in another branching reply..

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nishchai manjulaⓂ
Jan 11, 2018 4:28 PM

🔲reedv you were using sqlline with parameters to execute directly from command line. Once adding double quotes to for -u along with auth=maprsasl and replace --run from -f issue resolved the issue.
ex:-
sqlline -u "jdbc:drill:zk=<hostname1:5181,hostname2:5181,hostname3:5181>;auth=maprsasl" -n <user> -p <password> -f <filepath for query>

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⚙ **reedv**
@ nishchai manjula on Jan 11, 2018 4:36 PM

This solved the problem. The connection inputs now look like:

```
sqlline> !connect jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181;auth=maprsasl
Enter username for jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181: mapr
Enter password for jdbc:drill:zk=mapr001:5181,mapr002:5181,mapr003:5181: <nothing, since using sasl for ticke
```

Furthermore, the query I was using was attempting to write to the drill workspace dfs.root`/some/dir/relative/to/mapr/root`. Looking at the storage plugin file in the drill web UI (accessible through the MCS Services menu), it can be seen that that workspace has write permissions set to false (would need to define a new workspace here that had write permissions to the desired file locations).

1 person found this helpful

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maprcommunity Ⓜ
@ reedv on Jan 12, 2018 9:40 AM

Thank you so much for sharing your learning!!

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maprcommunity Ⓜ
@ reedv on Jan 12, 2018 9:40 AM

Thank you so much for sharing your learning!!