Determining the Query Execution Path for OJAI Queries

This section describes how to determine whether an OJAI query directly accesses MapR-DB JSON or leverages the OJAI Distributed Query Service.

Enable OJAI tracing, which logs information that allows you to determine which execution path your queries use.

To enable tracing, set the following property in your log4j.properties file, located in the /opt/mapr/conf directory:

```
log4j.logger.com.mapr.ojai.store.impl=TRACE, stdout
```

If the query does not use the OJAI Distributed Query Service, you will see tracing like the following:

```
2017-07-17 17:35:59 TRACE OjaiDocumentStore:132 - Query Plan: '[{"streamName":"DBD ocumentStream", "parameters":{"queryConditionPath":false, "indexName": "abc_Idx", "pro jectionPath":["c", "b", "a"], "primaryTable": "/tmp/test-728918932/ei_suffix_sort"}}]'
```

If a query uses the OJAI Distributed Query Service, you will see tracing like the following instead:

```
2017-07-17 18:51:13 TRACE OjaiDocumentStore:132 - Query Plan:'[{"streamName":"Dril lDocumentStream","parameters":{"sql":"select t.`$$ENC00NQYF6YJUL5UW45AAL5UWI`,t.` $$document` from dfs.`/tmp/testTable` t where (t.`l0_a4_int` = -92) order by t.`l0_a4_int` ASC,t.`_id` DESC"}}]'
```

```
2017-07-17 18:51:14 DEBUG DrillDocumentStream:120 - DocumentResultsListener[1].que ryIdArrived(queryId = 2692966d-0888-96e2-fa09-0d9befcd3173 ,sql string = select t. `$$ENCOONQYF6YJUL5UW45AAL5UWI`,t.`$$document` from dfs.`/tmp/testTable` t where (t.`lo_a4_int` = -92) order by t.`lo_a4_int` ASC,t.`_id` DESC)
```

Note that the **Query Plan** in the second trace fragment above contains a **DrillDocumentStream** instead of a **DBDocumentStream**. The **sql** parameter in that stream shows a SQL query. This is also missing in the first trace fragment above. The presence of the SQL query indicates that OJAI passes the query to the OJAI Distributed Query Service, as noted in the third trace fragment.

For further information about OJAI query plans, see Examining the OJAI Query Plan (ExaminingOJAIQueryPlan.html#concept_nml_g12_pbb). For background information about different query execution paths, see OJAI Distributed Query Service (.../ArchitectureOJAIQueryService.html#concept_pc2_4ws_p1b).