[ODBC]ODBC log collection via Azure IR

Last updated by | Veena Pachauri | Mar 8, 2023 at 11:23 PM PST

Note: Please walk customer through this TSG instead of just sending steps to customer. Make sure customer removes logSettings in payload after troubleshooting.

If you are working on any ODBC connector via Azure IR, please follow the procedure to move forward.

We support following ways to collect ODBC logs:

1. Collect logs on Azure IR without debugging pool (**copy activity only**)
2. Collect logs on SHIR (all activities) or Debug tool

Approach 1 requires customer to prepare a blob storage to hold the logs, see detailed steps below. Also it is a newly released feature, if you have any feedback, please leave a message to zhenqxu.

Approach 2: More detail, Please refer to the TSGs:

https://supportability.visualstudio.com/AzureDataFactory/_wiki/wikis/AzureDataFactory/286988/-Oracle-ODBC-debug-tool

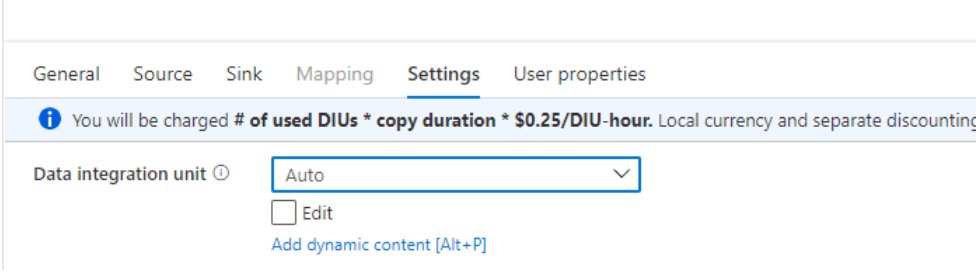
https://supportability.visualstudio.com/AzureDataFactory/_wiki/wikis/AzureDataFactory/286865/-ODBC-Collecting-Detail-Logs-for-ODBC-Based-Connectors

Go through the following steps to determine which approach should be used to collect log:

1. Is this an Azure IR issue? If no, go to 2
2. Is this a copy activity / can the issue be repro-ed with copy activity? if no, go to 2
3. Is this issue a stuck issue? if yes, go to 2
4. Use approach 1.

Detailed steps of approach 1:

1. If customer used DIU 2, please increase to 4 temporarily. If it is already Auto, no need to change.



2. customer need to edit the JSON payload of a copy activity to enable logging. If customer already has logSettings property in the payload, customer only need to add *"enableOdbcDiagnosticLog": true* under logSettings. If logSettings property does not exist, customer need to put the whole logSettings property under typeProperties. If customer has legacy settings like "logStorageSettings", please help customer migrate to the "logSettings" first.

referenceName is the **linked service name** of the blob storage which will hold the log.

path is the container name where logs will be stored. (will be created if not exist).

```
"logSettings": {
    "enableOdbcDiagnosticLog": true,
    "logLocationSettings": {
        "linkedServiceName": {
            "referenceName": "AzureBlobStorage2",
            "type": "LinkedServiceReference"
        },
        "path": "demo/odbcdiagnosticlogs"
    }
},
```

```
{
    "name": "OdbcLogOnAzureIR",
    "properties": {
        "activities": [
            {
                "name": "Progress_Success",
                "type": "Copy",
                "dependsOn": [],
                "policy": {
                    "timeout": "7.00:00:00",
                    "retry": 0,
                    "retryIntervalInSeconds": 30,
                    "secureOutput": false,
                    "secureInput": false
                },
                "userProperties": [],
                "typeProperties": {
                    "source": {
                        "type": "OracleSource",
                        "partitionOption": "None",
                        "queryTimeout": "02:00:00"
                    },
                    "sink": {
                        "type": "DelimitedTextSink",
                        "storeSettings": {
                            "type": "AzureBlobStorageWriteSettings"
                        },
                        "formatSettings": {
                            "type": "DelimitedTextWriteSettings",
                            "quoteAllText": true,
                            "fileExtension": ".txt"
                        }
                    },
                    "enableStaging": false,
                    "parallelCopies": 2,
                    "enableSkipIncompatibleRow": true,
                    "validateDataConsistency": false,
                    "logSettings": {
                        "enableOdbcDiagnosticLog": true,
                        "logLocationSettings": {
                            "linkedServiceName": {
                                "referenceName": "AzureBlobStorage2",
                                "type": "LinkedServiceReference"
                            },
                            "path": "demo/odbcdiagnosticlogs"
                        }
                    },
                    "dataIntegrationUnits": 8,
                    "translator": {
                        "type": "TabularTranslator",
                        "typeConversion": true,
                        "typeConversionSettings": {
                            "allowDataTruncation": true,
                            "treatBooleanAsNumber": false
                        }
                    }
                }
```

3. Customer rerun the copy activity, after the copy activity finishes, the log will be uploaded to the blob storage with path: <path>/copyactivity-logs/<activity name>/<activity id>/driverlog/

4. **(Important)** **Remove the add json in step 1. The perf of copy activity will be greatly impacted if logging is enabled (1000 times slow). Reset DIU settings if it is changed in step 1.**

Note: **if you need to collect huge amount of logs for Simba drivers (e.g. the pipeline will run a long time to reproduce the issue), you can set following properties:**

logLevel: Set the property to one of the following values:

0: Disable all logging.

1: Logs severe error events that lead the driver to abort.

2: Logs error events that might allow the driver to continue running.

3: Logs events that might result in an error if action is not taken.

4: Logs general information that describes the progress of the driver.

5: Logs detailed information that is useful for debugging the driver.

6: Logs all driver activity.

Default is 6

logFileSize: The maximum size of single log file in bytes. After the maximum file size is reached, a new file will be created and continues logging. Default 20971520.

logFileCount: The maximum number of log files to keep. After the maximum number of log files is reached, each time an additional file is created, the driver deletes the oldest log file. Default 50.

Please carefully choose logFileSize and logFileCount to controll the total size of logs. Keep total size smaller than 5GB. Reduce the logLevel to reduce the verbosity.

Payload:

```
"logSettings": {
    "enableOdbcDiagnosticLog": true,
    "odbcDiagnosticLogSettings":{
      "logLevel": "6",
      "logFileSize": 20971520,
      "logFileCount": 50
    },
    "logLocationSettings": {
        "linkedServiceName": {
            "referenceName": "AzureBlobStorage2",
            "type": "LinkedServiceReference"
        },
        "path": "demo/odbcdiagnosticlogs"
    }
},
```

How good have you found this content?