**Analytical Pipeline**

**Pre-requisite:**

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| --- | --- | --- | --- |
| No | Pre-requisite | Sample name of resource | Reference Link/compute details |
| 1 | Provision Azure Synapse workspace | <azsynapsews1> | <https://docs.microsoft.com/en-us/azure/synapse-analytics/get-started-create-workspace> |
| 2 | Provision SQL Pool | SQLPool1 | DW100c |
| 3 | Provision Spark Pool | SparkPool1 | Small Cluster/Medium Cluster |

**Note**: In the scripts, notebooks, wherever storage account, container or folder is referred, replace it with appropriate your storage account, container name and folder name.

**Setting up demo:**

|  |  |  |
| --- | --- | --- |
| No | Steps | Reference Link / Comment |
| 1 | Create containers named “rawdata” and “curateddata” in ADLS Gen 2 account |  |
| 2 | Create Folder “WWI” in rawdata container |  |
| 3 | Download compressed files in Data folder | ./Data/WWI.zip |
| 4 | Extract WWI csv files from compressed file and load it into “WWI” folder using Azure Storage Explorer |  |
| 5 | Download SQL scripts and Notebook from Develop folder and import those in Azure Synapse Workspace | . /Develop |
| 6 | Run SQL Script to load data into SQL Pool in the order as prefix.  After the execution, showcase select top 100 \* from any of the table. | Refer SQL script:  00 CREATE WWI TABLES.sql |
| 7 | In script 01 COPY INTO WWI TABLES.sql, replace <ADLSGen2 storage account> with your storage account name.  On execution of SQL script, data will be loaded into SQL pool tables. | Refer SQL script:  01 COPY INTO WWI TABLES.sql |
| 8 | Showcase Synapse SQL pool Security features.  Update your alias/teammate in SQL scripts before running these scripts | Refer Script:  02 Set up RLS DDM  03 Example run for RLS DDM |
| 9 | Synapse Spark data analysis | Refer Notebook:  04 Analyze data with Scala |
| 10 | Open SQL on-demand data exploration script and update path for the file before running it | Refer Script:  05 Data Exploration with SQLOD |
| 11 | Download compressed Power BI Report file from Develop folder. | . /Develop/WWI Sales Report.zip |
| 12 | 1. Extract the report and open it 2. Update connection string to your Synapse SQL end point. Change the data source (highlighted in image) in Power BI report with your own SQL server name and database name. |  |
| 13 | Publish it in your Power BI Workspace |  |
| 14 | Create a linked service to your Power BI workspace in Synapse | Go to Manage Hub -> Linked Services -> Add -> Power BI -> <Select your workspace> |
| 15 | Show edit Power BI report in Synapse workspace | Develop Hub -> Power BI -> Power BI reports |