



# The SAS<sup>®</sup> Viya<sup>®</sup> ETL Playbook

Charu Shankar

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With a background in computer systems management. SAS Instructor Charu Shankar engages with logic, visuals, and analogies to spark critical thinking since 2007.

Charu curates and delivers unique content on SAS, SQL, Viya, etc. to support users in the adoption of SAS software.

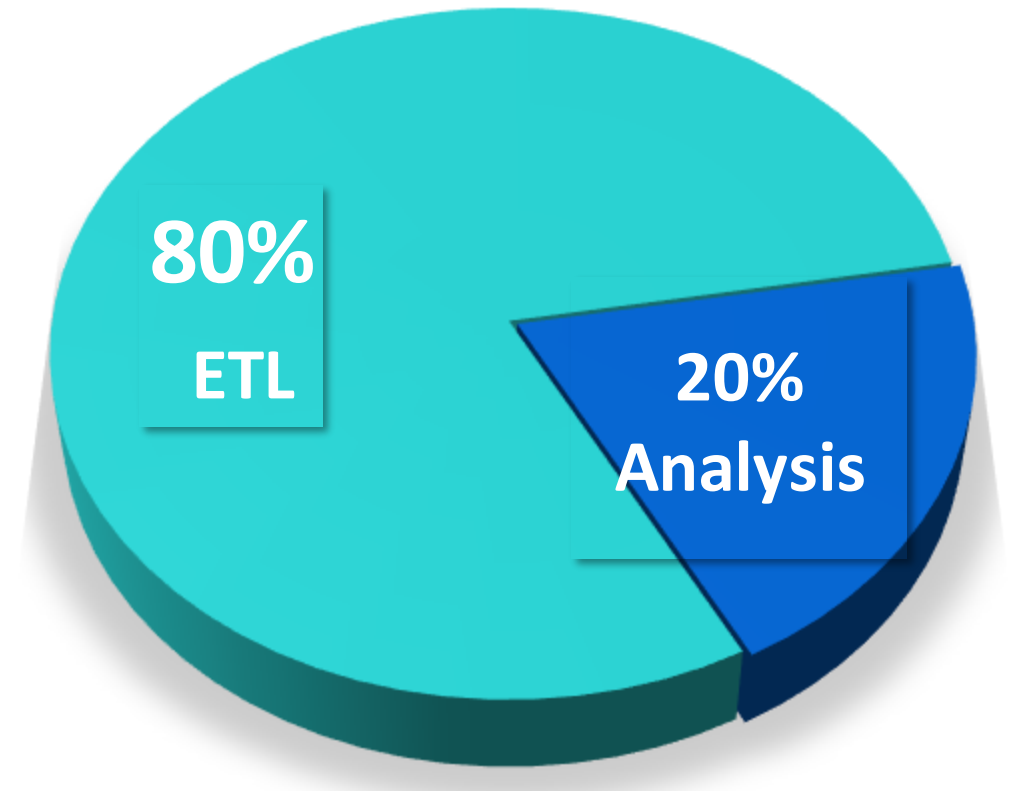
When not coding, Charu teaches yoga and loves to explore Canadian trails with her husky Miko.

# Agenda

- 1 ETL Purpose
- 2 ETL The Big Picture
- 3 Data Used
- 4 Servers in SAS Viya
- 5 Demo
- 6 Handy Links

# ETL Purpose

- Consolidate data from multiple sources
- Create a unified repository for analysis and processing.
- Provides a single source of truth with consistent data across the enterprise

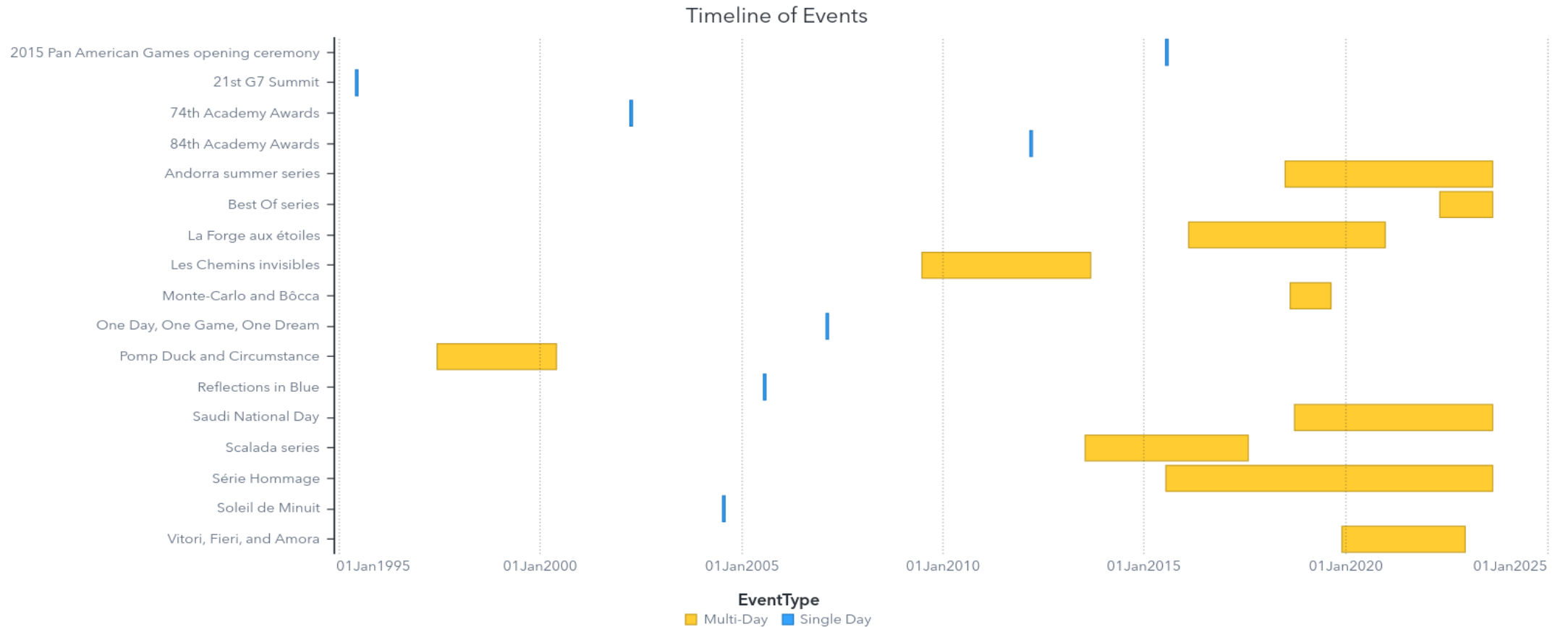


# ETL – The Big Picture

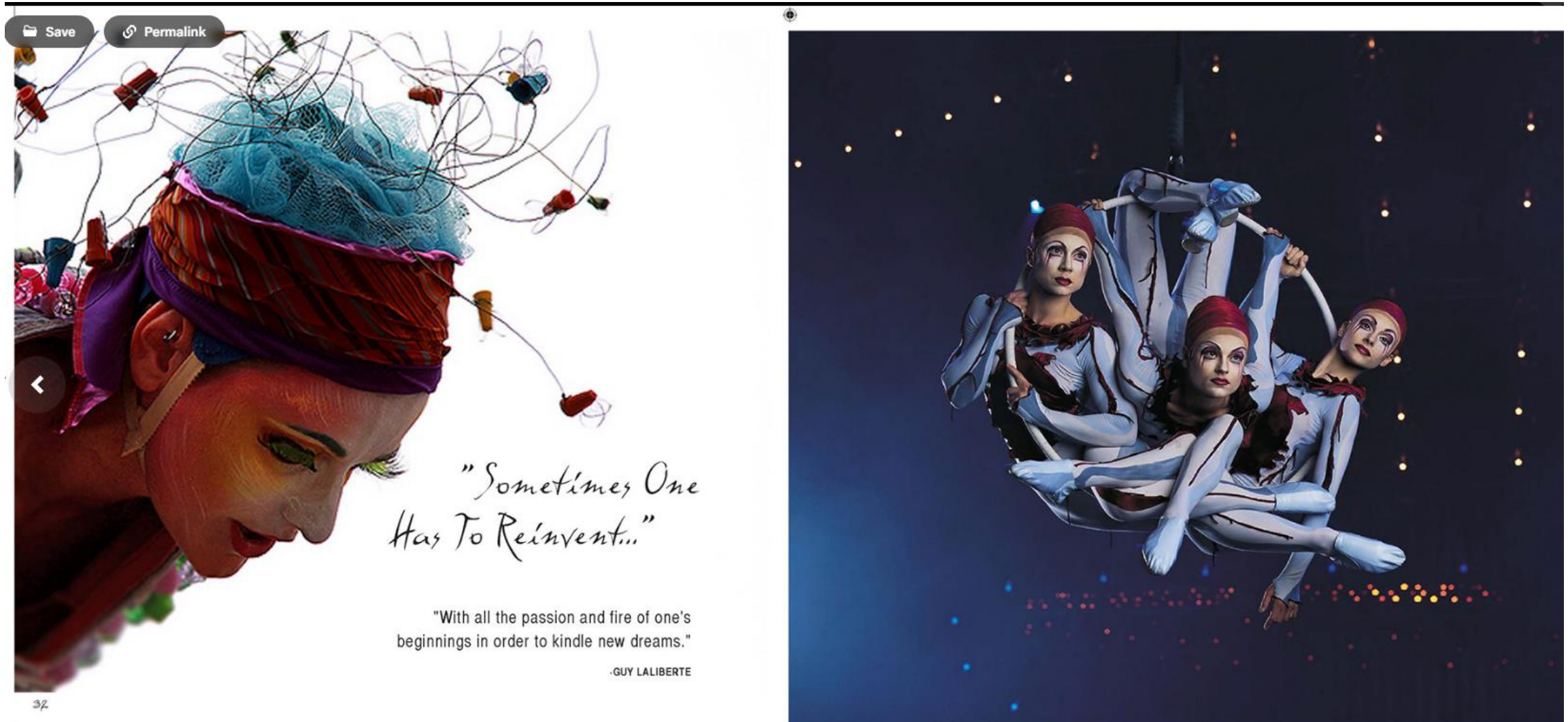
SAS® Visual Analytics - Explore and Visualize

Cirque du Soleil - Event Analysis

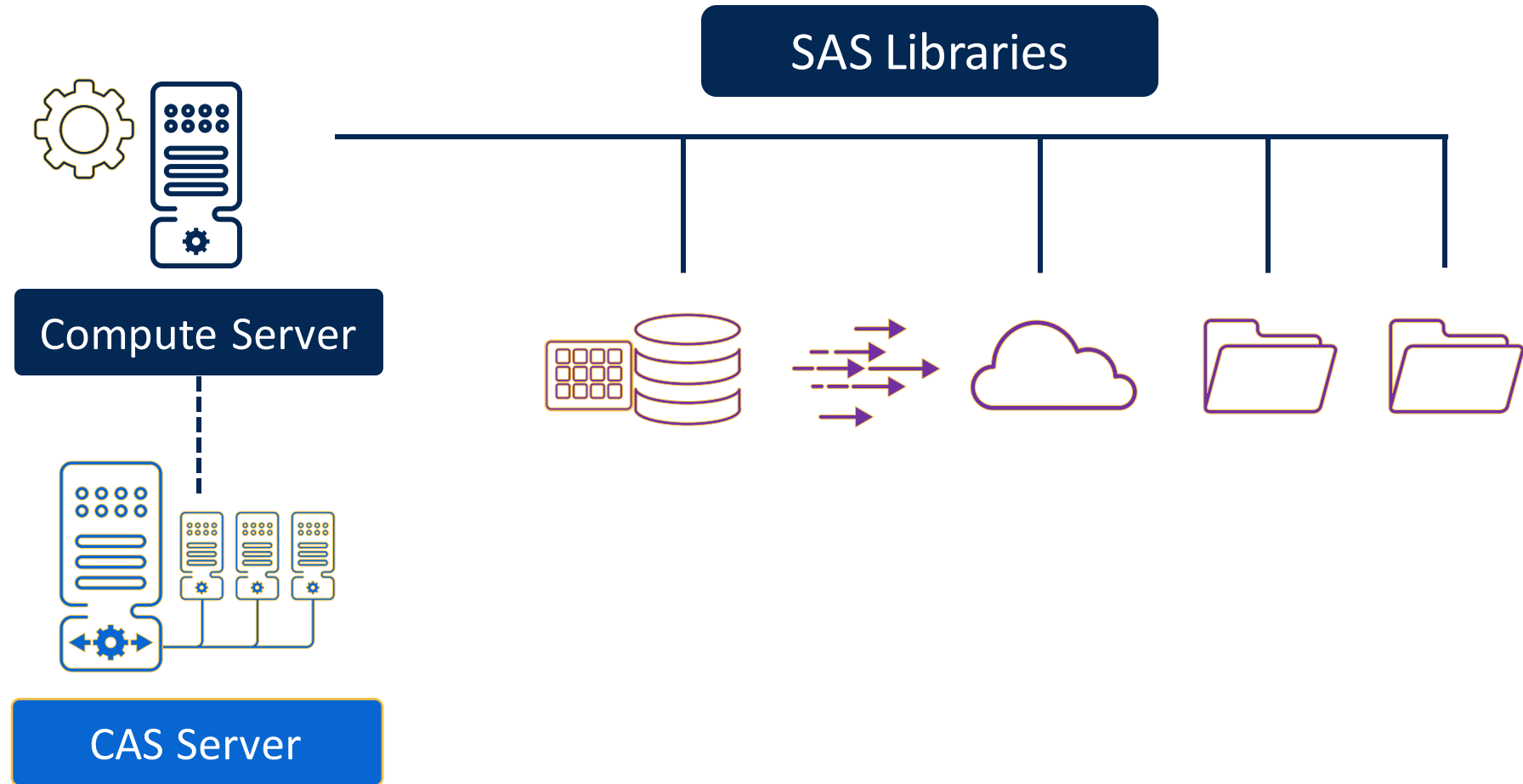
RawData | Timeline | Avg Run Time



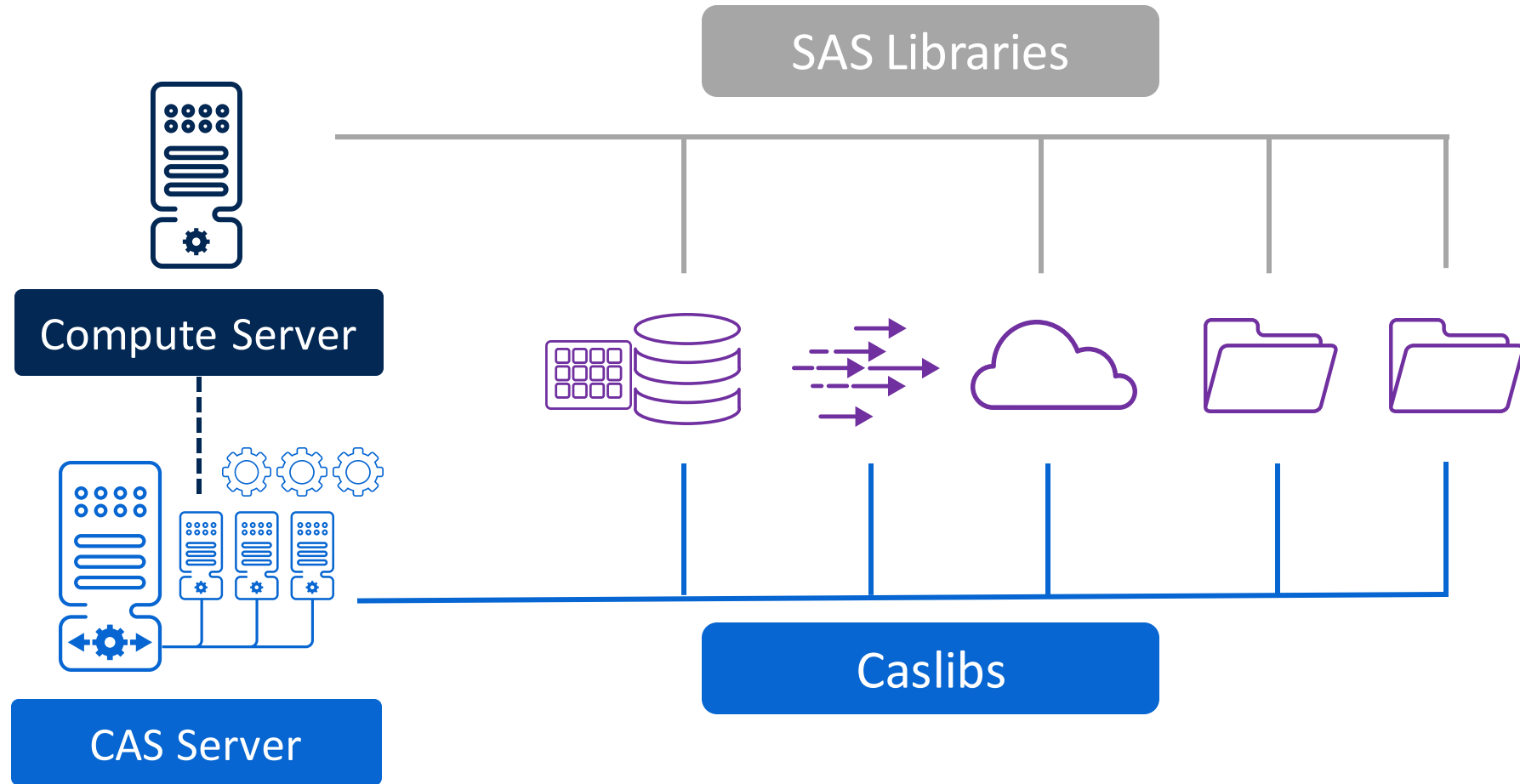
# Data Used In This Presentation



# Accessing Data Sources with Compute Server



# Accessing Data Sources with CAS Server





# ETL Demo

The screenshot displays the SAS Studio interface. On the left, the 'Libraries' pane shows a tree view of 'Connected Libraries' including MAPS, MAPSGFK, MAPSSAS, SASHELP, SASUSER, and WORK. The main editor window shows a SAS code file with the following content:

```
1 /* Assign XLSX Library */
2
3 libname xl xlsx "/home/student/S23PETL/cdata.xlsx";
4
5 /* Assign Database Library*/
6
7 libname db oracle path='//server.demo.sas.com:1521/ORCL' schema=S23VETL
8     user=student password='Metadata0';
9
10 /* create a caslib named casDB with the Oracle database as its data source */
11
12 cas con;
13
14 caslib casDB desc="Oracle caslib"
15     datasource=(
16         srctype="oracle"
17         /* UserIDs are passed to the DBMS as-is, and Oracle stores them in UPPER C,
18         ,path="//server.demo.sas.com:1521/ORCL"
19         /* Schema names are passed to the DBMS as-is, and Oracle stores them in UPI
20         ,username="STUDENT"
21         ,pwd="Metadata0"
22         ,schema="S23VETL"
23         ) libref=casDB global
24
25 ;
26
```

# Handy Links

[Loading and joining tables in Cas](#)

[ETL What it is and why it matters](#)

[Cirque du Soleil Annual Report 2010](#)

[SAS tip Conversion Excel to SAS dates](#)

[SAS® Viya® 3.5: FedSQL Programming for SAS® Cloud Analytic Services](#)

[An Introduction to SAS® Viya® 3.5 Programming](#)



# Thank you!

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