

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	15 January 2023
Team ID	591197
Project Name	Graphical Advantages :A Tableau Exploration Of Top Manga
Maximum Marks	4 Marks

Technical Architecture:

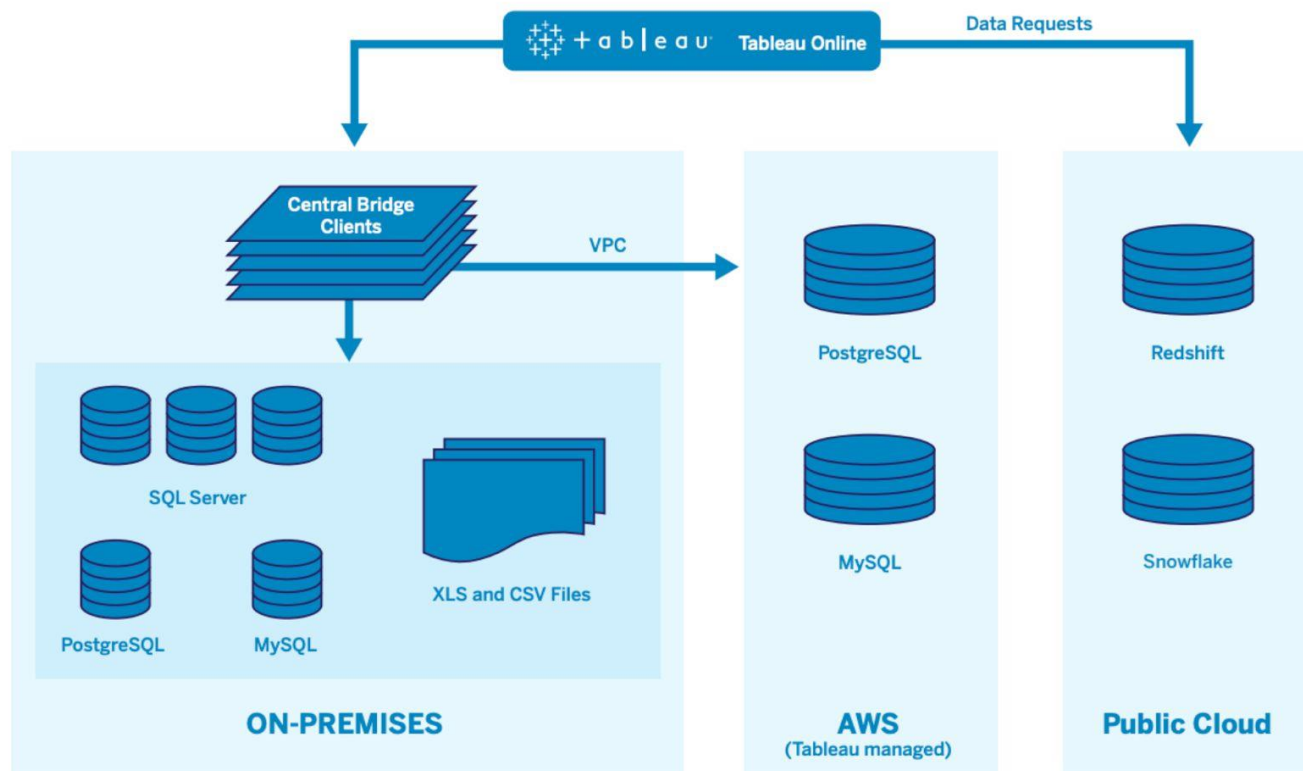


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Tableau: Powerful data visualization software for insightful graphical representation.	SQL, data connectors, and proprietary VizQL technology
2.	Application Logic-1	Visualizes data, generates insights, enhances decision-making through dynamic representations.	Tableau uses SQL, data connectors, and proprietary VizQL technology
3.	Application Logic-2	To create insights, improves decision-making, and visualizes data through dynamic representations.	Tableau uses SQL, data connectors, and proprietary VizQL technology
4.	Application Logic-3	Creating a visually appealing dashboards for both tech and non-tech users.	Tableau uses SQL, data connectors, and proprietary VizQL technology
5.	Database	Data Type, Configurations etc.	Excel
7.	File Storage	Disk needed to store system files	Hard Disk/Solid state drive
10.	Data Analytics Model	Extract insights, inform decisions, optimize strategies, and enhance organizational performance.	Tableau
11.	Infrastructure (Server / Cloud)	Cloud servers, storage, database, and Tableau Server for scalable infrastructure	Power BI

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Tableau Public, a free version, allows publishing and sharing interactive visualizations online. It's open to all for exploration	HTML, JavaScript, D3.js etc.
2.	Security Implementations	Tableau secures data with encryption, authentication, role-based access controls, and audit logs, ensuring comprehensive protection and compliance.	SSL, OAuth, Active Directory, and encryption

3.	Scalable Architecture	Tableau Server's scalable architecture involves distributed components, load balancing, and clustering, ensuring efficient performance with growing user and data demands.	Clustering, Load Balancing, In-memory Data Engine, Gateway ensure scalable Tableau architecture
4.	Availability	Cloud-based deployment, global data centers ensure Tableau's high availability.	Replication, Load Balancing, High Availability Cluster, and Server Monitoring for Tableau.
5.	Performance	In-memory processing, optimized queries, parallel processing ensure Tableau's high performance.	In-memory data engine, parallel processing, and optimized queries enhance Tableau performance.

References:

<https://www.educba.com/tableau-visualization/>

<https://www.cbr.com/best-manga-ever/>

<https://interacnetwork.com/best-manga-series/>

