Tableau Server Explained: Features and Functionality

Tableau Server is an enterprise-level, browser-based analytics platform that allows organizations to share, manage, and secure Tableau workbooks and data sources. It is designed to foster a culture of data-driven decision-making by making data accessible to authorized users across the entire organization, regardless of their location or device.

When users create visualizations and dashboards in Tableau Desktop, they can publish them to Tableau Server. This centralized platform then handles everything from data connectivity and security to user authentication and mobile access. The server acts as a hub for governed self-service analytics, ensuring that everyone is looking at the same, trusted data while providing a secure environment for sensitive information.

Key Functions of Tableau Server

Tableau Server performs several critical functions for an organization's data ecosystem:

- **Centralized Repository:** It serves as a single, trusted location for published workbooks, dashboards, and data sources, promoting consistency and eliminating data silos.
- **Security and Governance:** It manages user access permissions, ensuring that users only view data they are authorized to see. This includes row-level security and integration with existing corporate security systems.
- **Data Freshness and Automation:** It handles scheduled data refreshes, allowing dashboards to display the most up-to-date information without manual intervention.
- **Web and Mobile Access:** It allows users to interact with and edit published content directly through a web browser or a mobile application, enabling analytics anytime, anywhere.
- **Collaboration and Sharing:** It provides tools for commenting, sharing, and subscribing to views, facilitating collaborative analysis among teams.

Detailed Features of Tableau Server

Tableau Server is rich in features designed to provide a comprehensive, secure, and scalable environment for business intelligence.

1. Administration and Governance

Feature	Description
Site Management	Ability to create multiple "Sites" on a single server instance to segment users and content, providing multi-tenancy.
User and Group Management	Granular control over user roles (Viewer, Explorer, Creator, Site Administrator, Server Administrator) and integration with external directories like Active Directory.
Permissions and Security	Detailed project and content-level permissions to control who can view, interact, edit, or download workbooks and data.
Content Monitoring	Tools to track usage, performance, and adoption of content, data sources, and users.
APIs and Automation	REST API and Tableau Services Manager (TSM) for programmatic management, deployment, and configuration of the server.

2. Data Management and Governance

Feature	Description
Data Source Publishing	Centralized management of live and extract data connections, making data sources reusable and governed.
Scheduled Refreshes	Automatic data updates based on defined schedules, ensuring content remains current.
Data Quality and Certification	Ability to certify trusted data sources to guide users toward reliable data.
Web Data Connectors (WDC)	Tools to connect to web data, often used for data that does not have a native connector.

3. Collaboration and Interaction

Feature	Description
Web Authoring	The capability for authorized users to create new visualizations or edit existing ones directly in the browser without needing Tableau Desktop.
Subscriptions	Users can subscribe to specific views or dashboards and receive regular email snapshots containing the latest data.
Commenting	Allows users to discuss insights and collaborate directly within the published views.
Sharing and Export	Easy sharing of content links and options to export data or views to image, PDF, or PowerPoint formats.
Data Alerts	Users can set alerts on specific marks in a visualization to be notified when data breaches a certain threshold.

4. Scalability and Performance

Tableau Server is built for enterprise scale, providing features to handle large user bases and complex data loads:

- **Clustering:** The ability to distribute server processes across multiple physical or virtual machines to enhance performance and ensure high availability.
- **Load Balancing:** Distributes user requests across multiple background processes to optimize resource usage.
- **Caching:** Stores frequently accessed data extracts and views in memory to improve loading times.
- **Resource Monitoring:** Performance views and logs help administrators diagnose bottlenecks and optimize server configuration.

5. Access and Mobility

Users can access the server content through various means:

- **Browser Access:** All content is accessible and fully interactive through a standard web browser (Chrome, Firefox, Safari, Edge).
- **Tableau Mobile:** Dedicated mobile apps for iOS and Android, offering optimized viewing and interaction for smartphones and tablets.
- **Embedded Analytics:** The ability to embed published dashboards into external web portals or custom applications using the Tableau JavaScript API.

For detailed instructions on configuring server roles or managing permissions, please refer to the Administrator's Guide available as a File.
A live training session on using Web Authoring tools is scheduled for Calendar event on Date at the main office in Place. Contact Person for access details.