Tableau Certified Data Analyst

Beta Exam Guide

Awarded Credentials

Upon successful completion of this exam, candidates are awarded the title of Tableau Certified Data Analyst. This title is active for two years.

Target Audience

A Tableau Data Analyst enables stakeholders to make business decisions by understanding the business problem, identifying data to explore for analysis, and delivering actionable insights.

The Data Analyst uses Tableau Desktop, Tableau Prep, and either Tableau Server or Tableau Online to:

- Connect to data sources
- Perform data transformations
- Explore and analyze data
- Create meaningful visualizations that answer key business questions

This exam measures the candidate's:

- Knowledge of the capabilities of Tableau Desktop, Tableau Prep, and either Tableau Server or Tableau Online
- Ability to share content and keep the content current by publishing, scheduling, and maintaining it on the web

Exam Guide Disclosure

This document provides information on the structure of this exam, along with the knowledge and skills being measured. It suggests resources to help the candidate prepare for success. This document is not intended to build product knowledge nor to be used as a comprehensive list of exam content.

Learning Resources

There are no required prerequisites for this exam. Individuals learn differently and everyday use and exposure to Tableau varies.

The best preparation is role experience and time with the product. To be prepared, candidates are strongly encouraged to have at least 6 months of experience.

Beta Exam Format

- **Time Limit:** 150 minutes (includes 3 minutes for reviewing the NDA).

- **Exam Check-**in: Check-in begins 30 minutes before the scheduled exam time.

- **Question Format**: Multiple choice, Multiple response, Active screen, Build list, Display, Drag and drop, Hot area, Hands-on lab

- **Number of Questions**: 59 knowledge-based items, 1 Hands-on lab with 11 items. Total 70 items.

- **Scoring:** Candidates will receive their score at least 90 days after the beta period for the exam closes.

- **Passing Score:** The passing scaled score for the Tableau Certified Data Analyst exam is 750.

- **Language(s) Offered:** English

- **Exam Delivery Provider:** Pearson VUE

- **Registration:** Go to Pearson VUE to register for the Tableau Certified Data Analyst Beta exam. Look for announcements on tableau.com/certification for information on registration dates.

- **Exam Delivery Method:** Testing center and online delivery are both available. Learn more about the check-in process and testing experience for each method here.

System Preparation for an Online-Proctored Exam

For a successful exam experience, ensure your computer, network, and the physical environment are properly configured. This includes performing a system test before the exam. Review the Technical Requirements for complete details. For questions, email certification@tableau.com or visit tableau.com/certification.

Beta Exams

Beta exams are administered to ensure that the questions that we ask discriminate between qualified and non-qualified candidates. We do this by collecting statistical information on how a cohort of candidates performs on each item and the test overall. It also provides an opportunity to become one of the first users to earn this new credential.

Beta tests are longer than regular exams in terms of number of questions presented and amount of time the candidate has to complete the exam. Some of the questions you are presented with will not be on the final version of the test.

Beta candidates do not receive their score immediately following the exam. Exam results will emailed from Pearson VUE about 10–12 weeks after the exam.

Scaled Scoring

Scaled scores are a mathematical conversion of the number of items that a candidate answers correctly so that there is a consistent scale used across all forms of the exam. A relevant example is the process of converting pounds to kilograms. The weight of the object has not changed, only the units being reported.

Tableau exam results are reported as a score from 100 to 1000. The score shows how the candidate performed on the examination as a whole and the pass or fail designation. Scaled scoring models are used to equate scores across multiple exam forms that may have slightly different difficulty levels.

If you do not pass the Beta Exam, you will receive a score report. This report contains a table of categories of performance at each section level. This information is designed to provide general feedback concerning examination performance.

Exam Structure

The Tableau Certified Data Analyst exam has 3 sections. The first section is knowledge-based with a variety of item types, but no hands-on questions. The second section of the exam is the hands-on lab. This section requires the candidate to demonstrate their skills using Tableau. The third section resembles the first section in testing the candidate's knowledge with a variety of item types, but no hands-on questions. Candidates may not go back to a previous section of the exam once they have moved on to the next section. Each section of the exam has a specific weighting, some sections have more questions than others.

Item Types Defined

Multiple Choice: Candidates can select only one answer option.

Multiple Response: Candidates can select two or more answer options.

Active screen: Active Screen items incorporate interactive user interface elements, such as dropdown lists, checkboxes, option buttons, and drag-and-drop functionality. Candidates select answers using these elements.

Build list: Build List items evaluate a candidate's ability to rank a list of items or order a series of tasks. Candidates are given a split screen with a list of options in the left column and an answer space in the right

column. Using arrow buttons, candidates select options in the left column and sort them in the right column. Each option can only be used one time.

Drag and drop: Evaluate object association and placement skills with the Drag-and-Drop item type. Candidates select and reposition answer options within a list or graphic. In the example below, candidates drag source elements listed in the left column (Item List) into target positions in the right column (Category).

Hot area: Hot Area items evaluate a candidate's ability to locate correct regions on an image. Candidates are presented with an image. They submit an answer to the item by selecting specific locations on the image. These locations are activated by "hot area objects."

Hands-on lab: Candidates will work in a lab environment using Tableau to answer hands-on questions. Responses are automatically graded within the lab.

Splitter bar: In some special item type presentations – there is a "splitter bar" between the item and the answer area. Clicking on the splitter bar, changes the bar highlight to orange and allows candidates to drag the bar – making the viewing area larger when the candidate chooses.

Additional Exam Details

Access to Materials, Applications, or Internet

Exam items in the first and third sections are written at a recall or understand/apply level. These parts of the exam are administered without access to the Tableau Platform. The second, hands-on lab section of the exam requires the candidate to use the Tableau Platform to perform the required tasks. Candidates will have access to the .pdf version of Tableau Help during this section of the exam. Access to the internet, or any other outside application is prohibited during the entire exam.

Comments

Candidates are encouraged to comment on items in the exam. Feedback from all comments is considered when item performance is reviewed prior to the release of new versions of exam content.

Timeliness

Completing a task effectively and efficiently has become a standard that organizations expect from employees. This exam is timed as a critical competency of successful candidates.

Content Outline

As a reference, this exam guide includes test domains, coverage percentages and objectives only. The table below lists the main content domains and their weightings.

Domain Title	% of Exam Content
Domain 1: Connect to and Transform Data	24%
Domain 2: Explore and Analyze Data	41%
Domain 3: Create Content	26%
Domain 4: Publish and Manage Content on Tableau Server and Tableau Online	9%
TOTAL	100%

Domain Objectives

PLEASE NOTE: This is not a comprehensive listing of the content on this examination.

Domain 1: Connect to and Transform Data

1.1. Connect to data sources

    1.1.1. Choose an appropriate data source

    1.1.2. Choose between live connection or extract

    1.1.3. Connect to extracts

    1.1.4. Connect to spreadsheets

    1.1.5. Connect to .hyper files (or .tde files)

    1.1.6. Connect to relational databases

    1.1.7. Pull data from relational databases by using custom SQL queries

    1.1.8. Connect to a data source on Tableau Server

    1.1.9. Replace the connected data source with another data source for an existing chart or sheet

1.2. Prepare data for analysis

    1.2.1. Assess data quality (completeness, consistency, accuracy)

    1.2.2. Perform cleaning operations

1.2.3. Organize data into folders

1.2.4. Use multiple data sources (establish relationships, create joins, union tables, blend data)

1.2.5. Prepare data by using Data Interpreter, pivot, and split

1.2.6. Create extract filters

1.3. Perform data transformation in Tableau Prep

1.3.1. Choose which data transformation to perform based on a business scenario

1.3.2. Combine data by using unions

1.3.3. Combine data by using joins

1.3.4. Shape data by using aggregations

1.3.5. Perform filtering

1.3.6. Shape data by using pivots

1.4. Customize fields

1.4.1. Change default field properties (types, sorting, etc.)

1.4.2. Rename columns

1.4.3. Choose when to convert between discrete and continuous

1.4.4. Choose when to convert between dimension and measure

1.4.5. Create aliases

Domain 2: Explore and Analyze Data

2.1. Create calculated fields

2.1.1. Write date calculations (DATEPARSE, DATENAME...)

2.1.2. Write string functions

2.1.3. Write logical and Boolean expressions (If, case, nested, etc.)

2.1.4. Write number functions

2.1.5. Write type conversion functions

2.1.6. Write aggregate functions

2.1.7. Write FIXED LOD calculations

2.2. Create quick table calculations

2.2.1. Moving average

2.2.2. Percent of total

2.2.3. Running total

2.2.4. Difference and percent of difference

2.2.5. Percentile

2.2.6. Compound growth rate

2.3. Create custom table calculations

2.3.1. Year to date

2.3.2. Month to date

2.3.3. Year over year

2.3.4. Index

2.3.5. Ranking

2.3.6. First-last

2.4. Create and use filters

2.4.1. Apply filters to dimensions and measures

2.4.2. Configure filter settings including Top N, Bottom N, include, exclude, wildcard, and conditional

2.4.3. Add filters to context

2.4.4. Apply filters to multiple sheets and data sources

2.5. Create parameters to enable interactivity

2.5.1. In calculations

2.5.2. With filters

2.5.3. With reference lines

2.6. Structure the data

2.6.1. Sets

2.6.2. Bins

2.6.3. Hierarchies

2.6.4. Groups

2.7. Map data geographically

2.7.1. Create symbol maps

2.7.2. Create heat maps

2.7.3. Create density maps

2.7.4. Create choropleth maps (filled maps)

2.8. Summarize, model, and customize data by using the Analytics feature

2.8.1. Totals and subtotals

2.8.2. Reference lines

2.8.3. Reference bands

2.8.4. Average lines

2.8.5. Trend lines

2.8.6. Distribution bands

2.8.7. Forecast by using default settings

2.8.8. Customize a data forecasting model

2.8.9. Create a predictive model

Domain 3: Create Content

3.1. Create charts

3.1.1. Create basic charts from scratch (bar, line, pie, highlight table, scatter plot, histogram, tree map, bubbles, data tables, Gantt, box plots, area, dual axis, combo)

3.1.2. Sort data (including custom sort)

3.2. Create dashboards and stories

3.2.1. Combine sheets into a dashboard by using containers and layout options

3.2.2. Add objects

3.2.3. Create stories

3.3. Add interactivity to dashboards

3.3.1. Apply a filter to a view

3.3.2. Add filter, URL, and highlight actions

3.3.3. Swap sheets by using parameters or sheet selector

3.3.4. Add navigation buttons

3.3.5. Implement user guiding sentences (click…, hover…, menu options)

3.4. Format dashboards

3.4.1. Apply color, font, shapes, styling

3.4.2. Add custom shapes and color palettes

3.4.3. Add annotations

3.4.4. Add tooltips

3.4.5. Apply padding

3.4.6. Remove gridlines, row-level and column-level bands, and shading

3.4.7. Apply responsive design for specific device layouts

Domain 4: Publish and Manage Content on Tableau Server and Tableau Online

4.1. Publish Content

4.1.1. Publish a workbook

4.1.2. Publish a data source

4.1.3. Print content

4.1.4. Export content

4.2. Schedule data updates

4.2.1. Schedule data extract refreshes

4.2.2. Schedule a Tableau Prep workflow

4.3. Manage Published workbooks

4.3.1. Create alerts

4.3.2. Create subscriptions

Practice Exam Questions

These questions are provided to give candidates an awareness of the type of questions, structure, and wording to expect on the exam and should not be used to assess knowledge or preparedness.

Practice Question 1

You have a dataset that contains a list of gym equipment and the exercises that use them.

Equipment	Exercise
Barbell	Bench Press
Dumbbell	Bicep Curl
Jump Rope	Double-Under
Barbell	Front Squat
Dumbbell	Overhead Press
…	…

Which formula should you use to get the number of items in the equipment list?
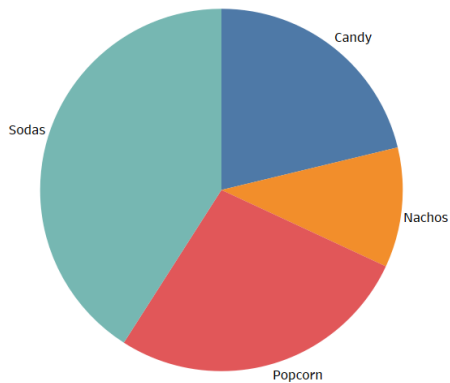
a)   MAX ([Equipment])

b)   COUNT ([Equipment])

c)   COUNTD ([Equipment])

d)   COVAR ([Equipment])

e)   ATTR ([Equipment])

Practice Question 2

You have the following dataset:

Item	Revenue
Candy	18,782
Sodas	36,241
Popcorn	23,987
Nachos	9,483

You want to create the following pie chart.

How should you configure the marks for the pie chart?

a)   Drag **Revenue** to Color, **Item** to Label, and **Item** to Angle.

b)   Drag **Item** to Color, **Item** to Label, and **Revenue** to Angle.

c)   Drag **Item** to Size, **Person** to Label, and **Revenue** to Detail.

d)   Drag **Revenue** to Color, **Revenue** to Label, and **Item** to Detail.

Solutions to Practice Exam Questions

Practice Question 1 - Answer and Rationale

You have a dataset that contains a list of gym equipment and the exercises that use them.

Equipment	Exercise
Barbell	Bench Press
Dumbbell	Bicep Curl
Jump Rope	Double-Under
Barbell	Front Squat
Dumbbell	Overhead Press
…	…

Which formula should you use to get the number of items in the equipment list?

a)   MAX ([Equipment])

INCORRECT – MAX does not apply to strings

b)   COUNT ([Equipment])

INCORRECT – COUNT will count each time an actor is listed, resulting in over-counting

c)   COUNTD ([Equipment])

CORRECT – COUNTD counts the distinct number of actors that appear in the list (which is 3).

d)   COVAR ([Equipment])

INCORRECT – COVAR does not apply because it is a measure of how much two variables change together

e)   ATTR ([Equipment])

INCORRECT – ATTR does not apply because it is a test for heterogeneity across the rows in a result set
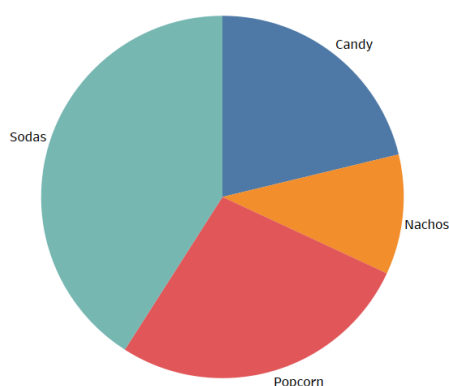
Learn more - https://help.tableau.com/current/pro/desktop/en-us/calculations_calculatedfields_aggregate_create.htm

Practice Question 2 - Answer and Rationale

You have the following dataset:

Item	Revenue
Candy	18,782
Sodas	36,241
Popcorn	23,987
Nachos	9,483

You want to create the following pie chart.

How should you configure the marks for the pie chart?

a)   Drag **Revenue** to Color, **Item** to Label, and **Item** to Angle.

INCORRECT – The field Item is invalid on Size for Pie Marks, which require continuous numeric fields.

b)   **Drag Item to Color, Item to Label, and Revenue to Angle.**

CORRECT – Using a Measure on the Angle and a Dimension on the Color and Label produce the example chart

c)   Drag **Item** to Size, **Item** to Label, and **Revenue** to Detail.

INCORRECT – The field Item is invalid on Size for Pie Marks, which require continuous numeric fields.

d)   Drag **Revenue** to Color, **Revenue** to Label, and **Item** to Detail.

INCORRECT – This creates a pie chart split evenly displaying Revenue as the label.

Learn more - https://help.tableau.com/current/pro/desktop/en-us/buildexamples_pie.htm

Notes and Revisions

Draft	Initial draft created for Beta Exams	
Draft v 1.1	Updated with new practice items	8/11/21