MicroStrategy | 2022

MicroStrategy Certified

Analyst

CONTENTS

ADMONISHMENT

By accessing the ANL certification project environment, you automatically agree to the terms and conditions listed in this section.

Terms and Conditions

MICROSTRATEGY INCORPORATED ("MICROSTRATEGY") AND ITS AFFILIATES RETAIN ALL INTELLECTUAL PROPERTY AND OTHER RIGHTS IN THEIR EDUCATION SERVICES OFFERINGS, COURSE MATERIALS AND CERTIFICATIONS. BY ENROLLING IN THE MCD PROJECT, YOU ACKNOWLEDGE THAT YOU HAVE READ AND AGREE THAT THE FOLLOWING TERMS AND CONDITIONS (this "AGREEMENT") GOVERN THE EXAMINATION AND CERTIFICATION PROVIDED. THIS AGREEMENT SHALL REMAIN IN FORCE AND APPLY TO ANY EXAMINATION(S) FOR WHICH YOU HAVE ATTAINED CERTIFICATION.

- You will not copy, publish, disclose, transmit, sell, offer to sell, post, download, distribute in any way, or otherwise transfer, modify, make derivative works of, reverse engineer, decompile, disassemble, translate any examination in whole or in part, in any form or by any means, verbal or written, electronic or mechanical, for any purpose.
- You will not disseminate examination content to any other person.

- You will not communicate any information, questions, or answers pertaining to the examination to any other person now or at any time in the future.
- You will not seek or obtain assistance on this examination from any other person, "brain dump" materials, or other unauthorized publications of examination questions (with or without answers) to prepare for the examination or for use during the examination.
- You will not provide assistance on this examination to any person now or at any time in the future.
- You will not falsify someone's identity or impersonate another individual to gain access to an examination.
- You will not collaborate in any unauthorized manner with one or more other students on the examination.
- You may not assign your rights or obligations under this Agreement. Any unauthorized assignment will be void.
- Any term or condition on any other document submitted by you shall be of no force or effect whatsoever, and is specifically rejected. MicroStrategy reserves the right to change this Agreement at any time and without notice.
- If you cheat on any MicroStrategy examination, MicroStrategy may take any or all of the following actions, in addition to any other rights or remedies at law:
    - Invalidate the results of the examination
    - Not permit you to register for other MicroStrategy examinations or certification projects for a period of 6 months or longer
    - Invalidate examinations for other employees within your company
    - If applicable, remove you from the published list of MicroStrategy certified partners.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, MICROSTRATEGY SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES RELATING TO THE CERTIFICATION EXAMINATION, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

1

SETTING UP YOUR ENVIRONMENT

Configuring your MicroStrategy Cloud environment

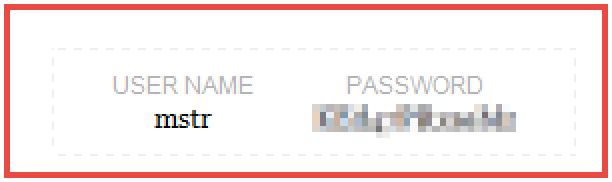
These are the steps that are necessary to access and configure your Cloud environment to complete the tasks required for the Analyst certification. The information that you need to access your environment is included in the prior communications sent to you. You must complete these steps before attempting the Analyst certification tasks.

Access and configure your cloud environment

1 In the Welcome to MicroStrategy email, click **Access MicroStrategy Platform**.

2 In the Login MicroStrategy web page, in the **User name** and **Password** boxes, type (or copy and paste) the login credentials provided in the MicroStrategy Cloud email, then click **Login**. The image below is an example of how the

credentials look in your email; the credentials that you need to use to log in will be different.



3 In the security window, reenter your cloud credentials. Select **Remember this password**, then click **Login**.

The MicroStrategy landing page displays in a browser window.

Open MicroStrategy Web

4 On the MicroStrategy Cloud landing page, scroll down and hover your cursor over **MicroStrategy Web**, then click the **Launch** icon that is displayed.

The MicroStrategy Tutorial Home page opens.

Google Chrome is the recommended web browser.

5 Click **Go to MicroStrategy Web**.

The Shared Reports folder of the MicroStrategy Tutorial project opens.

Creating the Certification subfolder

You need to save all the objects that you create, including any dossiers, reports, and supporting objects, within a custom folder called Certification. Save objects with the names indicated in the requirements, in the subfolder indicated in the requirements.

The grader reviews your objects in the indicated subfolder within the Certification folder only. No points are awarded if you save your reports or other objects in a different folder or subfolder. Likewise, no points will be awarded for an object that is not named correctly.

Create a Certification folder

1 In the Shared Reports folder, click **Create** and select **New Folder**.

2 In the Create Folder window, in the **Name** box, type **Certification**.

3 Click **OK**.

4 Click the **Certification** folder to access it. During each phase, you will create subfolders to save all your objects in.

2

PROJECT OVERVIEW

Certification guidelines

This certification is designed to test your ability to create dossiers, reports, and simple objects that are used on reports.

The following are the basic guidelines for completing the Analyst certification project:

- You must complete the project within the assigned time frame on the assigned day. This certification is timed, so you are not allowed to work extra hours. At the end of the assigned time, access to your MicroStrategy Cloud environment will be terminated.
- You must complete enough tasks to attain an overall passing grade of 80% on your first attempt and 80% on any subsequent attempts.
- When your project is graded, any of the following conditions result in the grader assigning 0 points for the overall task:
    - Any incorrect or missing task (or component of a task)
    - The object is not saved in the correct subfolder in the Certification folder
    - The object is not saved with the correct name

- To receive full points in a section, ensure all number formatting matches the specifications.
- Matching the result check provided for a report or dossier does not mean that you will receive full credit for that report or dossier. Points can be deducted for required features that are not present or not created correctly.
- In the Report Design phase, each report is evaluated on two parameters: correct report results and using the correct report requirements.
  - If the report results are incorrect, no points are given for the entire report.
  - If the report results are correct, but the correct report requirements are not met, you are awarded a portion of the total points for the report.
  - If the report results are correct and the correct report requirements are met, you are awarded the total points for that report. All of the reporting requirements must be met to obtain the total points associated with that task.
- You may use your course manuals, MicroStrategy online help, MicroStrategy product manuals, and the MicroStrategy Knowledge Base for assistance in completing the project. **However, you may not ask anyone for assistance**.

Analyst certification project phases

The Analyst certification project consists of the following phases:

- Dossier Design Phase (chapter 1)
- Report Design Phase (chapter 2)

Each chapter of this project manual contains descriptions of the tasks and result checks.

All phases of the project are completed in the MicroStrategy Tutorial project. The dossier and report phases are independent of each other.

Saving your objects

Save dossiers, reports, and other objects in the correct subfolder in the Certification folder. Save objects with the names indicated in the requirements. For example, the first dossier that you create must be named

Dossier 1: Region and Call Center Analysis in the Dossiers subfolder within the Certification folder.

The grader will review your objects in the correct subfolder in the Certification folder only. No points will be awarded if you save your objects in a different folder or subfolder, or with a name different from that indicated in the requirements.

Although the step to save your dossier or report is usually one of the last steps listed in the instructions, you should save it periodically as you work through the requirements, to ensure that all your changes have been saved.

Screen resolution

It is recommended to use the highest possible screen resolution on your machine to be able to view both the Analyst project booklet and the MicroStrategy software at the same time.

Analyst certification project environment

You complete all phases of the Analyst certification in the MicroStrategy Tutorial project in your Cloud environment. You do not need to create any other projects. You use MicroStrategy Web for all phases of the certification.

Monitoring certification time

You must complete the certification project within the assigned times. You are responsible for tracking your time. There are no automatic messages or pop-up timers that warn you when your project time is about to expire. At the end of the assigned time, you will be automatically disconnected from the virtual environment.

Project evaluation

The following table displays the Analyst Project Grading Sheet, which includes all the tasks on which your project is evaluated:

Analyst Project Grading Sheet

Project Task	Points
PHASE 1: DOSSIER DESIGN PHASE	
Dossier 1: • Imported and cleaned data from an external source • Data layers • Filters • Visualizations, including thresholds and drilling • Shared dossier	31
Dossier 2: • Imported data from MicroStrategy reports • Visualizations, including thresholds and formatting	14
Dossier 3: • Created a stand alone metric • Imported data from Existing Objects • Grid visualization, including thresholds and formatting	12
Total Task Points	**57**
PHASE 2: REPORT DESIGN PHASE	
Created Objects: • Prompt • Metrics • Filter	10
Report 1: • Correct result set • Use of required features (points awarded only if report results are correct)	18
Report 2: • Correct result set • Use of required features (points awarded only if report results are correct)	6
Report 3: • Correct result set • Use of required features (points awarded only if report results are correct)	9
Total Task Points	**43**
PROJECT TOTAL	**100**

Troubleshooting issues

While completing your certification, if you come across issues, such as connecting to your MicroStrategy Cloud environment or other technical issues within your environment, email your certification proctor, or Education@MicroStrategy.com for on-demand certifications. They will get back to you as soon as possible. In the email, include the following information:

- Date
- Contact information
    - Name
    - Phone number
    - Email address
- Issue Description: Provide as much detail as possible, including any screen shots
- Steps to reproduce the issue

3

Dossier Design Phase

Phase description

This phase of the certification project requires you to create dossiers in MicroStrategy Web.

Save the dossiers in the Dossiers subfolder in the Certification folder, with the names indicated in the requirements.

Create a Dossiers subfolder in the Certification folder

1. In the Certification folder, click **Create** and select **New Folder**.
2. In the Create Folder window, in the **Name** box, type **Dossiers**.
3. Click **OK**.
4. Click the **Dossiers** folder to access it. Use this folder to save all the objects that you create in this chapter/phase.

Dossier 1 creation

Create a dossier based on the following requirements:

- Import data from the **Geography Dataset** Excel spreadsheet.
  - This spreadsheet is supplied in the exercise files.
  - Create a multi-form attribute called **Manager**, based on the Manager ID and Manager Last Name. Each attribute form should be available to display.
  - Create a multi-form attribute called **Month**, based on the Month ID and Month Name. Only the Month Name form should be available to display, not the Month ID.
  - Convert **Revenue** from an attribute to a metric.
  - Define geography (also known as adding a geo role) for the Call Center attribute. Select the **City** geographic type.
  - One region is displayed as NW in the data preview, although it should be **Northwest**. Fix it using data wrangling.
    - Use a text selector on the column.
    - Find the abbreviation in the text selector and click Edit.
    - Type Northwest to replace NW.
- Save the dossier as **Dossier 1: Region and Call Center Analysis** in the **Dossiers** subfolder in the Certification folder.
  - Save the dossier periodically as you work through the requirements, to ensure that all your changes have been saved.
  - If you do not save the dossier with the correct name in the correct folder, you will receive no points for the dossier.
- Rename the chapter to **Analysis by Year**.
- Create a **heat map** visualization based on the following requirements:
  - Color the rectangles by the Profit that each Region and Call Center generates. (In the legend, colors are labeled as the percentage of Profit, not just Profit.)
    - Be sure that Region is listed above Call Center in the Editor panel drop zone.

- Size the rectangles by the Units Sold.
- Change the color range to Tropical Jungle.
- Adjust the color range to use these band endpoints:
  - Band 1 (red): 17
  - Band 2: 33
  - Band 3: 50
  - Band 4: 67
  - Band 5: 83 (add a new band, in the green range)
  - Band 6 (darkest green): 100

- Create a **bubble chart** visualization based on the following requirements:
  - Display Profit Margin on the vertical axis and Profit on the horizontal axis.
  - Display a bubble for each Call Center.
  - Color the bubbles by Region.
  - Size the bubbles by the Units Sold.
  - Display Revenue on the Tooltip.
  - Change the marker shape to a square.
  - Rename the visualization **Bubble Chart: Call Center Profit**.
- Create a **filter** using the Filter panel:
  - Filter on Year, with a display style of check boxes.
  - Display **2016** only.
- Create a **page or chapter** that automatically uses the same Filter panel as the previous visualizations. Only one option (page or chapter) is correct.
  - Name the page with the heat map and bubble chart **Region Data**.
  - Name the new page or chapter **Time Data**.

Develop the Time Data page or chapter

- On the **Time Data** page or chapter, create a **bar chart** visualization based on the following requirements:
  - Display Profit on the vertical axis and Month on the horizontal axis.

  - Color the bars by Quarter.
  - In the Editor panel, under Break By, set the bar chart to stacked.
  - Name the bar chart **Bar Chart: Monthly Profit**.
- On the **Time Data** page or chapter, create a **grid** visualization based on the following requirements:
  - Display Quarter and then Manager on the rows.
  - Display Revenue and then Profit on the columns.
  - Move the grid below the bar chart, so that all of the grid's columns are displayed.
  - Name the grid **Grid: Quarter and Manager Analysis**.

Develop the Maps page or chapter

- Create another **page or chapter** that automatically uses the same Filter panel as the previous visualizations.
  - Name this new page or chapter **Maps**.
- Define an additional geographic attribute for State using the Call Center attribute. Name it **State**.
- **Save** the dossier.
- On the **Maps** page or chapter, create a **map** visualization based on the following requirements:
  - Change the map style to Street.
  - Hide the title bar.
  - On the first data layer of the map:
    - Display a bubble for each Call Center.
    - Color the bubbles by Revenue and size them by Profit.
    - Cluster the bubbles.
    - Name this map layer **Call Center Bubble**.
  - Create a second data layer on the map:
    - Color the states by Revenue, using the Business Red color scheme on an area map.

- Name this map layer **State Area**.

Develop the Drilling page or chapter

- Create another **page or chapter** that automatically uses the same Filter panel as the previous visualizations.
    - Name this new page or chapter **Drilling**.
- Copy the heat map from the Region Data page or chapter to the Drilling page or chapter.
    - Drill to Quarter from New York, New Orleans, and Milwaukee.
    - Rename the visualization **Heat Map: Quarterly Profit**.
- Remove the blank grid visualization.

Add filtering

- On the **Region Data** page or chapter, filter the bubble chart using the heat map.
    - Use the heat map to display only the three southern regions in the bubble chart.
    - Rename the heat map visualization **Heat Map: Click to filter the bubble chart**.
- On the **Time Data** page or chapter, filter the bar chart by Call Center.
    - Use the List Box display style.
    - Allow multiple selections.
    - Display the title bar, and rename the filter to **Filter bar chart**.
    - Move the filter to the left of both the bar chart and the grid.
    - Filter the bar chart to display **Atlanta** and **Miami**.
- On the **Time Data** page or chapter, filter the grid by Manager.
    - Use the Check Boxes display style.
    - In the filter, display the Manager Last Name form, but not the Manager ID.
    - Display the title bar, and rename the filter to **Filter grid**.
    - Move the filter to the left of both the bar chart and the grid, below the bar chart filter.

- Filter the grid to display **Cooper**.

- On the **Maps** page or chapter, filter both map layers on Profit.
  - Use the display style of slider (the default).
  - Display Profit values less than or equal to $250,000. If you can't drag the slider to exactly $250,000, click the end point of the slider and type 250000 in the box.
  - Change the title bar font size to 8.
- Save your final dossier. Remember to save it as **Dossier 1: Region and Call Center Analysis** in the Dossiers subfolder in the Certification folder.

Result check: Creating Dossier 1

You can use the following result checks to verify whether your **Dossier 1: Region and Call Center Analysis** dossier yields the correct results:

- The **Filter panel** displays years, with 2016 selected. It applies to all the pages or chapters in the dossier.
- On the **Region Data** page or chapter:
  - New York has the largest rectangle on the heat map, with 68,592 Units Sold. It is also displayed in the darkest green, with $439,055 in Profit.
  - South, Southeast, and Southwest are selected in the heat map.
  - New Orleans has the largest square on the bubble chart, with 32,519 Units Sold.
  - Only Call Centers from the southern regions are displayed in the bubble chart.
- On the **Time Data** page or chapter:
  - **Filter bar chart** has Atlanta and Miami selected.
  - The bar chart displays data for 2016 Quarters only. The shortest bar is July 2016, with $5,636 in Profit.
  - **Filter grid** has Cooper selected.
  - The grid displays data for 2016 Quarters and Manager 18 Cooper only.
- On the **Maps** page or chapter:
  - The **Profit** filter is set for less than or equal to $250,000.

- The **Call Center Bubble** map layer displays 11 Call Centers (do not forget to count Call Centers that are clustered in a single bubble as separate).
- If you zoom in so that bubbles are not clustered, San Diego has the highest Revenue, with $98,024, so it is displayed in the darkest blue. The biggest bubble is New Orleans, with $201,149 in Profit. (Be sure to zoom out and save the dossier with at least one cluster displayed.)
- The **State Area** map layer displays 10 states. Utah and Washington are displayed in the lightest red, with $29,904 and $32,427 in Revenue respectively.

- On the **Drilling** page or chapter:
  - The Heat Map displays data for 2016 Quarters and New York, Milwaukee, and New Orleans.
  - The biggest rectangle is New York 2016 Q4, with 20,014 Units Sold. It is also the darkest green shade, with $116,407 in Profit.

Matching the result checks does not mean that you will receive full credit for your dossier. Points can be deducted for required features that are not present or not created correctly.

Sharing Dossier 1

Share the **Dossier 1: Region and Call Center Analysis** dossier to the Library.

- Certify the dossier.
- Share and add the dossier to your Library.
  - If prompted, when you launch Library, sign in with the login credentials provided in the Welcome to MicroStrategy email.

Complete the following steps in the dossier in your Library:

1. Change the Year filter to 2015.
2. Add a comment to the dossier

If you see a server error, a local firewall may prevent you from using the Collaboration Server and adding a comment. To get credit for this section, take a screenshot of this error and send it to education@microstrategy.com, with the subject line ANL Cert - Comment.

Result check: Sharing Dossier 1

You can use the following result checks to verify whether your **Dossier 1: Region and Call Center Analysis** dossier (as shown in Library) yields the correct results:

- The filter has 2015 selected.
- On the **Region Data** page or chapter:
  - New York has the largest rectangle on the heat map, with 57,522 Units Sold. It is also displayed in the darkest green, with $359,690 in Profit.
  - New Orleans has the largest square on the bubble chart, with 26,984 Units Sold. It is also the furthest right on the X axis, with $172,386 in Profit.
- On the **Time Data** page or chapter:
  - The bar chart displays data for 2015 Quarters only. The tallest bar is October 2015, with $13,786 in Profit.
  - The grid displays data for 2015 Quarters and Manager 18 Cooper only.
- On the **Maps** page or chapter:
  - The **Call Center Bubble** map layer displays 12 Call Centers (do not forget to count Call Centers that are clustered in a single bubble as separate).
  - The **State Area** map layer displays 11 states.
- On the **Drilling** page or chapter:
  - The Heat Map displays data for 2015 Quarters and New York, Milwaukee, and New Orleans.
  - The biggest rectangle is New York 2015 Q4, with 16,210 Units Sold. All the Northeast rectangles are displayed in green.

Matching the result checks does not mean that you will receive full credit for your dossier. Points can be deducted for required features that are not present or not created correctly.

Dossier 2 creation

Create a dossier based on the following requirements:

- **Import data** from the following MicroStrategy reports, all located in the Shared Reports\Subject Areas folder:
  - Sales and Profitability Analysis\Revenue and Profit Performance by Brand

- Sales and Profitability Analysis\Regional Sales Management Report
- Enterprise Performance Management\Profit Forecast
- Enterprise Performance Management\Revenue Forecast

- Save the dossier as **Dossier 2: Category Revenue and Profit Analysis** in the Dossiers subfolder in the Certification folder.
- Create a **grid** visualization based on the following requirements:
  - Use the Revenue and Profit Performance by Brand dataset.
  - Display Revenue and Revenue Growth values (in that order) by Year and then Category.
  - Highlight the Revenue Growth values using the Emerald color scheme. Create four equal bands. Restart the color range for each year.

    Hint: Delete the darkest green band.
  - Rename the visualization **Revenue Performance by Category**.
- Create a **pie chart** visualization based on the following requirements:
  - Use the Profit Forecast and Revenue Forecast datasets.
  - Slice the pie into wedges based on, and colored by, Category.
  - The size of the wedges are determined by Profit Forecast and Revenue Forecast. (This creates two pie charts.)
  - Stack the pie charts vertically.
  - Rename the visualization **Forecast by Category**.
- Create a **bar chart** visualization based on the following requirements:
  - Use the Regional Sales Management Report dataset.
  - Put Year, followed by Category on the horizontal axis.
  - Put Units Sold on the vertical axis.
  - Color the bars by Year.
  - Rename the visualization **Units Sold by Year.**
- Move the bar chart beneath the grid, and place both visualizations on the left side of the dossier. The two pie charts should take up the entire right side, to maximize readability.
  - Display the titles for all the visualizations on this page in a size 10 font.

- Ensure that the grid is sized so that both years, the categories, and both metric columns can be viewed.

- Use the grid to filter both the pie chart and bar chart.
    - Select Books, Movies, and Music on the grid.
- Name this page **Revenue and Profit Overview**.
- Create a new page or chapter that uses a different Filter panel than the previous visualizations. Only one option (page or chapter) is correct. Name this page or chapter **Network Display.**
- On this new page or chapter, create a **network visualization** based on the following requirements:
    - Use the Regional Sales Management Report dataset.
    - Connect Region to Category.
    - Use edge direction, node shapes, and node colors to ensure that it is easy to see that the lines originate at Region.
        - Use red hexagons for the To nodes.
        - Use green triangles for the From nodes.
    - Color the connections by Profit and size by Revenue.
    - Size the items by Revenue.
    - Rename the visualization **Region and Category Connected by Profit and Revenue**.
- Save your final dossier. Remember to save it as **Dossier 2: Category Revenue and Profit Analysis** in the Dossiers subfolder in the Certification folder.

Result check: Dossier 2

You can use the following result checks to verify whether your dossier yields the correct results:

- **Revenue Performance by Category** visualization: The lightest green is used for Revenue Growth for Movies in 2015 and Music in 2016.
- **Forecast by Category** visualization: There are two pie charts, one for Profit Forecast and one for Revenue Forecast. The Profit Forecast pie chart shows two slices and the Revenue Forecast pie chart shows three slices.

- **Region and Category Connected by Profit and Revenue**: The thickest arrow points to Electronics, which is the largest shape.

Matching the result checks does not mean that you will receive full credit for your dossier. Points can be deducted for required features that are not present or not created correctly.

Dossier 3 creation

Create the following object to use on the dossier:

- A metric that calculates the Revenue per Units Sold.
  - Format the metric values as currency, with two decimal places.
  - Set the subtotals to average.

Save the metric as **Revenue Per Units Sold**, in the Certification\Dossiers subfolder.

Create a dossier based on the following requirements:

- **Import data** using the following existing objects:
  - Attributes: Call Center, Region, Category, Subcategory
  - Metrics: Profit, Revenue, Units Sold, Revenue Per Units Sold
  - Hint: In the datasets panel, click Existing Objects and search for each of these items. Note the drop down pane to switch between searching for Attributes, Metrics, and Public Objects. The Certification\Dossiers folder is located in Public Objects\Shared Reports.
- Create a **grid** visualization based on the following requirements:
  - Display Region, Call Center, Category, and Subcategory (in that order).
  - Display Profit, Revenue, and Revenue Per Units Sold.
  - Show totals, displayed at the bottom of the grid.
- Format the grid in the following ways:
  - Rename the visualization to **East Coast Sales.**
  - Set the grid font to Arial, size 10.
  - Set the title font to Arial Black, size 14, and left-aligned.

    - Add the thickest solid border to the visualization, and color the border dark blue.

- Add an **element filter** to filter the grid by region:
    - Display the filter as a Link Bar, allow multiple selections.
    - Display Mid Atlantic, Northeast, and Southeast.
    - Change the font in the Filter to Arial, size 10.
- Save your final dossier as **Dossier 3: Sales Grid**.

Result check: Dossier 3

You can use the following result checks to verify whether your dossier yields the correct results:

- Only three regions are displayed on the grid.
- The total Profit for Books in Washington, DC is $50,723.
- The Revenue Per Units sold for Audio Equipment in Charleston is $232.18
- The total Revenue, across all categories and call centers, is $15,246,981.

Matching the result checks does not mean that you will receive full credit for your dossier. Points can be deducted for required features that are not present or not created correctly.

4

Report Design Phase

This chapter contains the tasks for the report design phase. Save all the objects in the Reports subfolder in the Certification folder, with the names indicated in the requirements.

Create a Reports subfolder in the Certification folder

1. In the Certification folder, click **Create** and select **New Folder**.
2. In the Create Folder window, in the **Name** box, type **Reports**.
3. Click **OK**.
4. Click the **Reports** folder to access it. Use this folder to save all the objects that you create in this chapter/phase.

Report design phase description

This phase of the certification project requires you to create a report from scratch, using MicroStrategy Web.

Save the reports and any objects that you create to use on the report in the Reports subfolder in the Certification folder, with the names indicated in the requirements.

Report 1 creation

Create the following objects to use on the report:

- A prompt that allows you to select the objects to display on the report.
  - The prompt should list the following attributes:
    - Call Center
    - Country
    - Region
  - Change the title to **Geography attributes**.
  - Save the prompt as **Geography Prompt**, in the Certification\Reports subfolder.
- A metric that calculates the sum of the Revenue fact.
  - Format the metric values as currency, with no decimal places.
  - Disable all subtotals.
  - Save the metric as **Revenue - No Totals**, in the Certification\Reports subfolder.
- A metric that calculates the average of the Revenue fact.
  - Use the Avg function, not the Average function.
  - Format the metric values as currency, with no decimal places.
  - Change the default subtotal function to Average.
  - Save the metric as **Average Revenue**, in the Certification\Reports subfolder.
- A smart metric that calculates the Cost Margin.
  - Switch to the Formula Editor.
  - Divide the Cost metric by the Revenue metric.
  - Format the metric values as percentage, with two decimal places.

    - Make it a smart metric.
    - Save the metric as **Cost Margin**, in the Certification\Reports subfolder.

Create a report based on the following requirements:

- Rows, in this order:
    - Geography Prompt
    - Promotion attribute
- Columns, in this order:
    - Revenue - No Totals metric
    - Average Revenue metric
    - Profit metric
    - Cost Margin metric
- Filter
    - All southern regions.

Run the report based on the following requirements:

- Select the following for the prompt answers:
    - Call Center
    - Region
- Use the prompt page to display Region to the left of Call Center on the report.
- Show totals.
- Save the report as **Prompted Promotion Analysis**, in the Reports subfolder in the Certification folder.
    - Keep the report prompted.
    - Set the current prompt answers to be the default prompt answers.

Result check

You can use the following result checks to verify whether your report yields the correct result set:

- The result set contains 41 rows and 4 columns.

- 3 Regions are displayed on the report.
- The Revenue - No Totals value for No Promotion in New Orleans is $2,675,607.
- The Average Revenue value for No Promotion in New Orleans is $43.
- The Cost Margin value for No Promotion in New Orleans is 82.40%.
- The Cost Margin total in New Orleans is 84.72%.

Matching the result checks does not mean that you will receive full credit for your report. Points can be deducted for required features that are not present or not created correctly.

Report 2 creation

Create the following object to use on the report:

- A filter that includes only the promotions listed below. Save the filter as **Promotion Filter** in the Certification\Reports subfolder.
    - 10: Back-to-School-Sale
    - 10: Spring Sale
    - 15: Holiday Sale
    - 20: Midnight Madness Sale

Begin with the Prompted Promotion Analysis report that you created in the previous task, *Report 1 creation, page 29*.

- Run the report and select only Region as a prompt answer.
- Edit the report to add the Promotion Filter.
- Save the report as **Static Promotion Analysis**, in the Reports subfolder in the Certification folder.
    - Save the report as static (not prompted).
    - **Do not overwrite the previous report**

Result check

You can use the following result checks to verify whether your report yields the correct result set:

- The result set contains 16rows and 4 columns.

- 3 Regions are displayed on the report.
- The Revenue - No Totals value for the Back-to-School sale in the South is $145,208.
- The Average Revenue value for the Spring Sale in the South is $40.
- The Cost Margin value for the Holiday Sale in the Southeast is 97.13%.
- The Cost Margin total in the South is 94.60%.

Matching the result checks does not mean that you will receive full credit for your report. Points can be deducted for required features that are not present or not created correctly.

Report 3 creation

Begin with the Prompted Promotion Analysis report that you created previously, *Report 1 creation, page 29*.

- Run the report and select only Region as a prompt answer.
- Display data at the employee level, instead of at the Region level.
  - Hint: Drill on the report from the Regions column.
- Only show results where the Average Revenue is greater than $34. Add a filter that does not modify what data is retrieved from the data source.
- Save the report without changing its new name. Do not keep the report prompted.

Result check

You can use the following result checks to verify whether your report yields the correct result set:

- The result set contains 61 rows and 4 columns.
- The total Profit for Michael Bates is $156,450.
- For 0-No Promotion, Ian Benner has an Average Revenue of $44.
- The total Cost Margin for Matthew Hunt is 84.72%.

Matching the result checks does not mean that you will receive full credit for your report. Points can be deducted for required features that are not present or not created correctly.

Copyright Information

Trademark Information