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Welcome

Welcome and thank you for registering for the Web Intelligence Fundamentals course. At the conclusion of this class, you will have the skills and knowledge to:

- Navigate the InfoView portal.
- Create a new Web Intelligence report.
- Apply filters to your report.
- Organize data in your report through sorting, breaking, and sectioning.
- Format the data and overall report.
- Add formulas and variables to perform calculations.
- Add and change data blocks.
- Apply alerts and rankings to highlight specific records or data.
- Organize your documents in folders and categories.
- Share documents through InfoView or email inboxes.

We expect students to participate actively throughout the class by asking questions, providing examples, and participating in class discussions.

Please print this Participant Guide. It will help direct you through the class. Be sure to have your printed copy with you during all sessions.

If you have any questions or concerns as you prepare for this program, please don't hesitate to contact Datatel at services@datatel.com.

We look forward to working with you!

Important Notices

Particularly important information is emphasized by the following notices.

- **Activity:** Indicates class participation or interaction.
- **Alert:** Indicates cautionary information.
- **Best Practices:** Indicates best practices or recommended ideas for applying content.
- **Technical Tip:** Indicates a technical tip or trick.
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Module 1: Introduction

Concepts

Introduction

The purpose of this section is to provide the basic concepts of Higher Education Intelligence and how SAP BusinessObjects tool, Web Intelligence, fits into that structure.

Higher Education Intelligence

*Higher Education Intelligence* is a term created by Datatel to describe the various components of Datatel’s reporting solutions. Built on strong, industry-proven business intelligence technologies, Higher Education Intelligence is wrapped in insight and experience provided by Datatel.

There are two major components incorporated in the Higher Education Intelligence design:

- Datatel Reporting & Operating Analytics
- Datatel Performance Analytics

These two components rely on using DataOrchestrator ODS to read data from your Colleague database -- and potentially other databases across campus.

Datatel Performance Analytics

*Datatel Performance Analytics* is a data warehouse and analytic reporting application incorporating best practices in higher education performance management. Performance Analytics is used for longitudinal analysis.
Datatel Reporting and Operating Analytics

Datatel Reporting & Operating Analytics is segmented into an area powered by SAP BusinessObjects and another area for integrated dashboards. The focus of this class is using one of SAP BusinessObjects tools, Web Intelligence, to create queries and reports based on your Colleague data.

Web Intelligence

Web Intelligence is a web-based query, reporting, and analysis tool allowing self-service access to your data. Provided by SAP BusinessObjects, you can create intuitive reports and analyze the information from Colleague which leads to more educated decisions. You can query from scratch, retrieve an existing report, format the results, and analyze the data to understand the underlying trends and root causes.
Terminology

Introduction

The purpose of this section is to provide you with the terms and definitions used throughout this guide and throughout the Web Intelligence tool.

Universe

A universe is a layer of metadata needed by Web Intelligence to interpret data in DataOrchestrator ODS. The universe metadata includes user-friendly names and descriptions making it easier to identify the appropriate data to include in your report.

A universe is also sometimes referred to as a connector.

Class

A class is a logical grouping of data in the universe. Classes provide an easier way to locate data in the universe through segmentation. When creating a Web Intelligence document, you can use dimensions and measures for any classes within the universe.

A class is also sometimes referred to as a folder.

Dimension

A dimension is a piece of data that is used for display, filters, and sorts in your report. Please note that you cannot perform summary calculations on a dimension.

Measure

A measure is a piece of data that is used for display, filters, and sorts in your report. In addition, you can apply calculations to measures (such as summing or averaging the data).

Context

A context is a targeted view of data in a universe. You might think of a context as a road map: There may be many roads that lead to a destination and what is seen or experienced depends on the road taken. For example, the “Preferred Address” context deals only with a person’s preferred address. Think of this as the direct route. Whereas “All Addresses” context is more of the scenic route as it deals with preferred, former, seasonal, and all other types of addresses.

A context is defined at the universe layer of metadata.
How Things Fit Together

Introduction

The purpose of this section is to describe how data is sent from Colleague, through DataOrchestrator ODS, to the universe, and finally to your Web Intelligence report.

Colleague to Web Intelligence

Data are entered and maintained in Colleague. Datatel’s DataOrchestrator ODS extracts data from Colleague and populates it into an Operational Data Store (ODS). An ODS contains snapshots of data from a specific time, typically from a nightly refresh, that are organized for reporting purposes.

The universes used in this class read from the ODS. A universe acts as a metadata layer that renames elements into business terms and connects these elements to enable drag-and-drop functionality. Web Intelligence documents use universe information to build ad-hoc reports. Users access and manage Web Intelligence documents through the web-based interface, InfoView.
## Activity

Match the term in the left column and the corresponding description in the right column.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universe</td>
<td>A snapshot of the transactional database.</td>
</tr>
<tr>
<td>Class</td>
<td>Data used for display, filtering, and sorting as well as aggregation.</td>
</tr>
<tr>
<td>Dimension</td>
<td>A portal through which WebI documents are accessed and managed.</td>
</tr>
<tr>
<td>Measure</td>
<td>Designed at the Universe layer to access specific information. Can be thought of as a “road map.”</td>
</tr>
<tr>
<td>Context</td>
<td>A layer of metadata that interprets and represents ODS data.</td>
</tr>
<tr>
<td>Operational Data Store</td>
<td>A web-based reporting and analysis tool.</td>
</tr>
<tr>
<td>InfoView</td>
<td>Similar to a folder, used to organize information in a Universe.</td>
</tr>
<tr>
<td>Web Intelligence</td>
<td>Data used for display, filtering, and sorting, but not aggregation.</td>
</tr>
</tbody>
</table>
This page is blank intentionally.
Module 2: InfoView Overview

Access InfoView

Introduction

The purpose of this section is to provide you with the steps required to log into InfoView and describe the components on the InfoView Home page.

InfoView

*InfoView* is a portal to objects in your SAP BusinessObjects Enterprise system such as:

- Hyperlinks
- Shortcuts
- Custom My InfoView page layouts
- Crystal Reports
- Web Intelligence documents
- Voyager workspaces
- Desktop Intelligence documents

Access InfoView

Since Web Intelligence is a web-based tool, your system administrator must provide you with an appropriate URL to access it. When you access the URL, you are required to log in with a pre-defined user name and password.
InfoView Home Page

Once logged in, your Home page displays.

You can customize the Home page to better meet your needs by selecting Preferences.

Under the Navigate Heading

Notice the Navigate options listed on the left side of the Home page.

**Navigate**

View your Inbox, Favorites, or Document Lists. Use the Help to learn more about InfoView.

- Document List
- My Favorites
- My Inbox
- Information OnDemand Services
- Help

- **Document List** is a set of folders, files, and categories to which you have access. In most cases, you select the Document List upon entering InfoView. Once in the Document List, you have access to My Favorites and My Inbox as well as the ability to create new reports and run existing reports.
- **My Favorites** is a list of folders, files, and categories to which you have identified as your favorites.
- **My Inbox** is a list of messages, such as report results, sent to you through the SAP BusinessObjects.
- **Information OnDemand Services** is a link within InfoView which loads the SAP BusinessObjects website into a new browser.
- **Help** is a link within InfoView which opens the searchable Help dialog box.
Document List

Introduction

The purpose of this section is to provide you with a guide for how to use the Document List to manage and search for your documents.

Organizing Reports

There are two ways in which objects are organized in SAP BusinessObjects Enterprise: by folders and categories.

- **Folders** are the actual way SAP BusinessObjects Enterprise organizes objects.
- **Categories** allow you to make intuitive representations of these organizations.

For example, you may have a Web Intelligence document defined to a specific folder but is accessible from several categories.

Document List

The *Document List* allows you to explore all files, folders, and categories to which you have access. If you have items in My Favorites or Inbox, you can access them here as well as from the Home page.

Public Folders allows you to view all the components to which you have access using a Windows Explorer style of navigation. To expand the Public Folders, click the + sign next to the folder.
Depending on your security, you may see only a subset of items available to you.

**Search Existing Reports by Title**

The most common method for searching for reports is by title. Any title that include the word or words you enter in the search box display in your search results. To search by title, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click <strong>Document List</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Document List" /></td>
</tr>
<tr>
<td>2</td>
<td>Click the folder in which you'd like to search for a report. For example, click <strong>Public Folders</strong>.</td>
</tr>
<tr>
<td>3</td>
<td>Ensure <strong>Search title</strong> is selected.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Search title" /></td>
</tr>
<tr>
<td></td>
<td>If not, click the drop-down arrow and select <strong>Search title</strong>.</td>
</tr>
</tbody>
</table>
### Search Existing Reports by Keyword

You can associate keywords to your reports which enable you to search for those reports by keywords. To search by keywords, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select <strong>Search keyword</strong> instead of Search title.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Screenshot of search configuration options" /></td>
</tr>
<tr>
<td>2</td>
<td>Enter the keywords in the search box.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Screenshot of search results" /></td>
</tr>
<tr>
<td>3</td>
<td>Press ENTER or click the magnifying glass.</td>
</tr>
</tbody>
</table>

The search results display both reports and folders that meet your criteria.

---

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The sample reports do not include keywords. To add keywords to any report, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right-click the report and select <strong>Properties</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Properties window" /></td>
</tr>
<tr>
<td></td>
<td><strong>Step 1: Properties window</strong></td>
</tr>
<tr>
<td>2</td>
<td>The report properties are displayed. You can enter any keywords or phrases in the Keywords field. Each word or phrase should be separated by a comma.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Keywords field" /></td>
</tr>
<tr>
<td></td>
<td><strong>Step 2: Keywords field</strong></td>
</tr>
<tr>
<td>3</td>
<td>Click <strong>OK</strong>.</td>
</tr>
</tbody>
</table>

Adding descriptions and keywords to reports you create are discussed later in this class. Check with your Business Objects Enterprise Administrator prior to modifying any Datatel sample reports.
Datatel Sample Reports

Note the folder Datatel Sample Reports. Datatel delivers over 70 pre-defined reports across all business areas. You can run these reports against your data at any time or create a copy of a sample report to modify it to meet your institutional requirements.

Under Datatel Sample Reports are a variety of folders separated by business function. When you highlight a specific folder, the available reports display on the right side of the screen.

For example, when highlighting CORE Universe Samples, three reports display in the detail pane of InfoView.

The information about each report includes:
- Title
- Description or business questions addressed by the report data
- Last run date and time
- Report type (such as Web Intelligence or Crystal Report)
- Owner
- Number of instances of the report

Activity

Use the Search function to find any Datatel sample report with “Academic Credentials” in its title.
Manage Reports

Introduction

The purpose of this section is to provide you with the steps necessary to copy and paste reports, create shortcuts to "master" reports, and save reports under a new name.

Create a Folder

As a user, you have access to the "My Favorites" folder. Use this folder to manage reports that you create or those you access on a regular basis. To assist organizing reports, consider creating sub-folders.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In the Document List pane, highlight the &quot;My Documents&quot; folder. <img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>2</td>
<td>Click the drop-down arrow next to the <strong>New</strong> button and select <strong>Folder</strong>. <img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>3</td>
<td>The <strong>Create Folder</strong> dialog displays. Enter a name for the folder and click <strong>OK</strong>. <img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Copy and Paste Reports Between Folders

You may wish to create a copy of an existing report and paste the new version in another folder. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Navigate to the document and highlight the document name.</td>
</tr>
<tr>
<td>2</td>
<td>Click the drop-down arrow next to the Organize button and select Copy.</td>
</tr>
<tr>
<td>3</td>
<td>Navigate to the new folder and highlight it.</td>
</tr>
<tr>
<td>4</td>
<td>Click the drop-down arrow next to the Organize button and select Paste.</td>
</tr>
</tbody>
</table>

The report is now in the new folder.
If you copy the document, it exists in the old and new folder. You can use **Cut** instead which removes it from the old folder when you paste it into the new folder.

You can also delete a document by highlighting it and selecting **Organize > Delete**.

Never delete or move any Datatel sample reports. You can make copies of those reports and move the copy to another folder. Your Business Objects security defines what you can move, copy, or modify.

### Create a Shortcut

In addition to having documents exist in a folder you can also create shortcuts for frequently-used reports to a My Favorites folder. Shortcuts are pointers to the original document, so any changes to the original report are reflected.

Simply select the **Copy Shortcut** and **Paste Shortcut** -- rather than Copy and Paste.

### Save a Report Under a New Name

When working with existing reports, consider whether you want to modify an existing report or create a copy of that report and modify the copy. If you’d like to modify a copy of an existing report, you first need to save the report under a new name. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Run the report.</td>
</tr>
<tr>
<td>2</td>
<td>Select <strong>Document &gt; Save as.</strong></td>
</tr>
</tbody>
</table>

![Save as screenshot](image)
3 Select the folder where you’d like to save the report. Enter the new name of the report. If the description, keywords, and so forth are not displayed, click Advanced to display those additional options.

4 Click OK to save the report under the new name.

When you save the report, it saves all the report specifications including the query details, prompts, formatting, and so forth.

**Activity**

Create a folder under My Favorites. Make a copy of the Basic Person Demographics using the Save As process. Give the reports a new name, such as yourinitials Person Demographic Report. Place it in the new folder.

If the Advanced options are not displayed, click the Advanced button. Alter the description and provide keywords, such as Gender, Age band, Full name, and/or State.

**Note:** The other two option are discussed in a later module.
Run a Report

Introduction

The purpose of this section is to provide you with the steps to run a Web Intelligence report and navigate in the report window.

Run a Report

Follow the steps below to run a report.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right-click the report name and select View.</td>
</tr>
<tr>
<td>2</td>
<td>In some cases, the report is defined to prompt the user for parameters and filters for the report. Those prompts display and require the user to select or enter an option. The results display once all prompts have been completed. Creating and using prompts is covered in a later lesson.</td>
</tr>
</tbody>
</table>

Report Results

Once the report is run, the results display in the browser window.

**Basic Person Demographics**

<table>
<thead>
<tr>
<th>Person ID</th>
<th>Person Full Name</th>
<th>Person Gender</th>
<th>Person Ethnic Desc</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000016</td>
<td>Ayres, John</td>
<td>M</td>
<td>White, Non-Hispan</td>
</tr>
<tr>
<td>0000018</td>
<td>Burger, Kathleen</td>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

Navigation Map

Similar to Microsoft Excel, you can have multiple tabs within a single report. For example, one tab may display the table with the data details and the next tab displays the data in a graphical format.

The *Navigation Map* is a pane on the left-side of the report results window displaying the different variations, or tabs, of the report.

You can display multiple data blocks -- such as a table and graph -- on the same tab as well. We review creating and using tabs in a later module.
**Results Toolbar**

The *Results toolbar* is used to work with report results. The Results toolbar includes the following options:

- **Document**: Displays a drop-down menu allowing you to close, edit, or save the report results in different formats (such as in Excel or PDF formats).
- **View**: Displays a drop-down menu allowing you to select different ways to view the results (such as in page mode or PDF mode).
- **Save**: Opens the **Save As** dialog box so you can save the results.
- **Print**: Exports the results to PDF format so you can print the results.
- **Find**: Opens the Find options -- in place of the Navigation Map on the left side -- so you can search for specific text in the report results.
- **Undo**: Resets the report to how it displayed before your last change.
- **Redo**: Resets the report to how it displayed after you undid your last change.
- **Zoom**: Changes the size of the results based on the percentage set.
- **Page Number**: Displays the current page number. Use the arrows to the left and right of the page number to navigate between pages.

- **Edit**: Opens the **Modify** window allowing you to change the report specifications.
- **Refresh Data**: Runs the report again to capture new data and allows you to enter new parameters in the report prompts.
- **Purge Data**: Removes data saved to the document.
- **Track**: Turns on data tracking allowing you to monitor changes in data.
- **Show Changes**: Displays changes in data when Data Tracking is turned on.
- **Data Tracking Options**: Allows you to set various options about how Data Tracking operates for the report.
- **Show/Hide Report Filter toolbar**: Displays or hides the Report Filter toolbar.
- **Start Drill mode**: Allows you to drill down to see underlying data supporting the data displayed.
Refresh Report Data

You may have times when you’ve run a report but would like to refresh the data. This may be because you would like to enter different criteria in the filters or because the data has been updated since you last ran the report.

To refresh report data, click the Refresh Data button, on the Results toolbar.

If the report has prompts, those prompts appear allowing you to enter different criteria. The prompts default to the value(s) entered for the last execution of the report.

Once you enter data in the prompts, the report displays.

Save the Report

You have a number of options for saving your output including the following formats:

- Excel
- PDF
- CSV (comma separated values)
- CSV with options

To save the report output, click the Save button and select the Save to my computer as menu option and then the appropriate format.

Activity

Use the copy of the Basic Person Demographic Report created in the previous activity to create a PDF version of the report. Be sure to use the Preferred Address context for this report. Review the PDF document. Does the information display correctly? If not, what needs to be altered? Share your observations with the class.

A number of exercises will ask you to write questions about your experience with WebI. Use an additional sheet of paper to compile these questions and answers throughout this class.
Report Modes

Introduction

The purpose of this section is to provide you with a description of the different modes in which you can view your report.

View

When you run a report, you view the results but cannot modify them. This mode is good for printing report results. In addition, you have the option of viewing the report results in a couple of other ways including page mode and PDF mode.

- **Quick Display mode** is the default. This displays the results in a single frame without page breaks or page formatting (such as margins). It does include tables, graphs, etc. However, it is possible this mode does not display all possible data. Instead, it is intended to quickly display the results so that you can make adjustments without worrying about the amount of data extracted from your database.
- **Page mode** is similar to Print Preview in that it displays the results based on your page settings. This allows you to determine if you need to adjust your margins, headers, footers, and so forth.
- **Draft mode** is similar to Quick Display mode in that it displays the page regardless of the page settings. The difference is that **Draft mode** displays all data whereas Quick Display shows only a limited set of data.
- **PDF mode** displays the results through your default PDF program, such as Adobe Acrobat. You can then save the results in PDF format for distribution.
Edit Report

To modify the report, you must go into Edit mode.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the <strong>Edit</strong> button.</td>
</tr>
</tbody>
</table>

This places you in Edit mode where you can modify the report structure -- i.e., the look and feel of the report.

Depending on your security profile, you may not have edit capabilities on existing documents.

Edit Query

When you go into Edit mode, it defaults to editing the report structure. You can also edit the query.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the <strong>Edit Query</strong> button.</td>
</tr>
</tbody>
</table>

When you edit the query, you can add and remove data objects as well as modify query filters.
Logging Out

Introduction

The purpose of this section is to provide you with the proper way to log out of InfoView so you avoid hanging sessions.

Close Reports

Before logging out of InfoView, you should close any reports you currently have open. There are two ways to close a report.

Option 1

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the drop-down arrow next to Document and select Close.</td>
</tr>
</tbody>
</table>

Option 2

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the small X in the upper right corner of the document.</td>
</tr>
</tbody>
</table>

In either case, you return to the main navigation pane where your folders are displayed.
Log Out of InfoView

Once you have closed all reports, you can log out of InfoView.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the <strong>Log Out</strong> button in the upper right corner of the InfoView page.</td>
</tr>
</tbody>
</table>

**Do not close the browser without first logging out of InfoView.** If you do, your InfoView session is still running in the background, and you should contact either your System Administrator or BusinessObjects Enterprise Manager to ensure the session is discontinued appropriately.

An improperly closed InfoView session retains the license granted to that session. Depending on the number of licenses and people accessing InfoView, this could prevent another person from logging into InfoView.

Activity

Open the **yourinitials Person Demographic Report**. Examine the report using each of the view modes. Which viewing mode do you think you will use most often?

Click the **Edit** button. While in **Edit Report** mode, take a few moments to explore the tool bars and other areas. Write down 2 to 3 questions about what you see and what you want to learn more about.

Click the **Edit Query** button. Explore the tool bars and other areas. Again, write 2 to 3 questions about what you see and want to learn more about.
Module 3: Create a New Report

Starting Out

Introduction

The purpose of this section is to describe the steps needed to start a new Web Intelligence document.

Select a Universe

You can access a variety of objects in Web Intelligence. However, the focus here is to create a new Web Intelligence document. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click <strong>Document List</strong>.</td>
</tr>
<tr>
<td>2</td>
<td>Select <strong>New &gt; Web Intelligence Document</strong>.</td>
</tr>
<tr>
<td>3</td>
<td>Select an appropriate universe.</td>
</tr>
</tbody>
</table>

![Image showing the steps to select a universe](image-url)
The classes in that universe display. You can select objects from any classes displayed, as long as those objects are defined to the same context.

Add Results Objects

To add objects to display in your report output, you need to add them to the Results Objects pane. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expand the appropriate class.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Click and drag the object from the <strong>Data Manager</strong> pane into the <strong>Result Objects</strong> pane.</td>
</tr>
</tbody>
</table>
3. Continue clicking and dragging various objects into the **Result Objects** pane until all required objects are represented.

<table>
<thead>
<tr>
<th>Result Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person ID</td>
</tr>
<tr>
<td>Person Full Name</td>
</tr>
<tr>
<td>Person Age Band</td>
</tr>
<tr>
<td>Person Ethnic Desc</td>
</tr>
</tbody>
</table>

**Run the Report**

To see the report output, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click <strong>Run Query</strong>.</td>
</tr>
</tbody>
</table>
| 2    | The results display.  

**Report Title**

<table>
<thead>
<tr>
<th>Person ID</th>
<th>Person Full Name</th>
<th>Person Age Band</th>
<th>Person Ethnic Desc</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000012</td>
<td>Ayres, John</td>
<td>Unknown</td>
<td>White, Non-Hispanic</td>
</tr>
<tr>
<td>0000016</td>
<td>Burger, Kathleen</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>0000018</td>
<td>Epps, Thomas</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

During report creation, set a limit on the number of rows retrieved to speed up execution. In Edit Query mode, click the **Properties** tab, check the **Max rows retrieved** check box, then set that number.
Add More Objects

Once your report is created, you can add additional data objects. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click <strong>Edit Query</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Edit Query" /></td>
</tr>
<tr>
<td>2</td>
<td>Click and drag the additional data objects from the <strong>Data Manager</strong> pane into the <strong>Result Objects</strong> pane.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Data Manager" /></td>
</tr>
<tr>
<td>3</td>
<td>Click <strong>Run Query</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Run Query" /></td>
</tr>
</tbody>
</table>

When you do this, the data objects are not included in the report output immediately. You need to add them.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure the <strong>Data</strong> tab is displayed in the <strong>Data Manager</strong> pane.</td>
</tr>
<tr>
<td>2</td>
<td>Click and drag the new data object into your report.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Data Manager" /></td>
</tr>
</tbody>
</table>

If you place the new data object over an existing data object, it replaces the existing data object.
Move Existing Objects

You can also reposition data objects in the results.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click and drag the data to the new position. When you see the small bar, it indicates the data will move in between the other two columns. In the example below, the Person Ethnic Desc is moved between the Person Full Name and Person Age Band.</td>
</tr>
</tbody>
</table>

![Table example](Image)

You can also swap columns.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click and drag the column heading over the column heading you wish to swap. In the example below, the Person Age Band and Person Gender columns are swapped. Don't forget that you can use the Undo button to revert any changes if you don't like the results.</td>
</tr>
</tbody>
</table>

![Table example](Image)
Save the Report Specifications

When you finished editing, you should save your document.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the Save icon and select the “Save as…” option.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Save dialog" /></td>
</tr>
<tr>
<td>2</td>
<td>The Save Document dialog displays. Select the folder where you want to save the document. Be sure to provide your report with a descriptive name.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Folder selection" /></td>
</tr>
<tr>
<td>3</td>
<td>Click on the Advanced button to provide additional information about the document.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Advanced button" /></td>
</tr>
<tr>
<td>4</td>
<td>Provide a description of the report (its purpose and questions answered) along with keywords useful when searching for Web Intelligence reports.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Document options" /></td>
</tr>
</tbody>
</table>
Check the “Refresh on open” option to read data from the ODS tables each time the report is opened. Leave this box unchecked if you want users to have the option to choose when to refresh data in the report.

The “Permanent regional formatting” check box overrides the locale preferences, e.g. time-zone and language, set in the General section of a user’s InfoView preferences.

Check the Refresh on open box to display the lastest information from the ODS tables.

**Activity**

Create a demographic report using the Person class of the Core ODS R1_1 Universe. Include the **Person ID**, **Person Full Name**, and **Person Age Band** dimensions.

Open the Person Address class and add the **Person Address City**, **Person Address State Desc**, and **Person Address Zip** dimensions.

Set the number of rows retrieved to 1000.

Run the report and review the results. Be sure to use the “Preferred Address” context.

Save the report using *yourinitials Person Report*.

Bring the report back up using Edit Query. Add the **Person Gender** dimension to the report and view the results. Place this dimension between the **Person Age Band** and **Person Address City** dimensions.

Save the report using *yourinitials Person Report*.
Properties

Introduction

The purpose of this section is to provide you with the options available to modify via the Properties tab.

View Report Properties

The Data Manager pane includes a tab for Properties. However, the options available in the tab depend on what you have selected in the report.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click any white space in the report.</td>
</tr>
<tr>
<td>2</td>
<td>Select the <strong>Properties</strong> tab to view the overall report properties.</td>
</tr>
</tbody>
</table>

When viewing the report properties, the **Properties** tab is separated into four sections: **General**, **Appearance**, **Page content**, and **Page layout**.

- The **General** section allows you to change the name of the report tab as well as view the Document Properties pane by clicking the **Detail** button (−) next to the Document name.
- The **Appearance** section allows you to set colors and a background image for the report.
- The **Page content** section allows you to set details for the number of records to display in Quick Page Mode.
- The **Page layout** section allows you to define page margins, orientation, and header and footers.
View Report Section Properties

The **Properties** tab changes when you select a different section of the report. For example, if you click the header section of the report, the **Properties tab** allows you to change the appearance of the header.

**View Cell Properties**

You can also modify the properties of a specific cell -- either a column heading or a data cell. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the cell and select the <strong>Properties</strong> tab.</td>
</tr>
</tbody>
</table>

You have many options for modifying the formatting including setting the Autofit options, font, background color, style, etc.

To use inches as the measure, click the **User Settings** icon.

The **User Settings** dialog box displays. Select inches from the Measurement Unit dropdown.

The options displayed in the Properties tab change based on what is highlighted or selected in the report.
Activity

Open the *yourinitials Person Report*. Set the **Measurement unit** to either inches or centimeters. Change the page orientation to landscape and page size to letter. Change Header cells background color and font size. Set background color of the footer to Gray 25%.

Save your report using the same name.

Review the questions you wrote when exploring Edit Report and Edit Query modes. At this point, which of those can you answer for yourself?
Module 4: Filters

Overview

Introduction

The purpose of this section is to provide you with a list of types of filters you can use in a Web Intelligence report as well as a description of the parts of a query filter.

Use a Filter

*Filters* are used to select a certain set of records to appear on your report rather than all records. In most cases, you apply a filter to your report.

Types of Filters

There are four main types of query filters in Web Intelligence.

- *Pre-defined filters* are defined in the universe by your system administrator or universe designer. These carry over to the classes and allow you to quickly add the filter to your report without indicating exact criteria -- the criteria were already pre-built by the designer.

- *Simple filters* are used when you want to select records based on a single value or multiple values based on a single dimension or measure.

- *Prompted filters* are used when you wish to prompt the user for the filter criteria rather than hard-coding the filter on the report.

- *Complex filters* are used when you need to filter your report based on data in more than one dimension or measure.
Parts of a Query Filter

A query filter has four components.

- The **connector** affects how two or more lines of criteria are evaluated relative to each other.
- The **dimension or measure** identifies the object on which you wish to filter your data.
- The **operator** indicates the relationship between the values of the dimension/measure and the operand.
- The **operand** contains the values you are checking for in your query.
Simple Filters

Introduction

The purpose of this section is to provide you with the steps needed to create a simple filter.

Add Objects to a Query Filter

To add a filter to your query, you must be in Edit Query mode. You can select objects from either the classes or the Result Objects pane and place them into your filter.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To select a dimension or measure, click and drag the object from the Data Manager pane to the Query Filters pane.</td>
</tr>
<tr>
<td>2</td>
<td>When you do so, the basis of your filter is added.</td>
</tr>
</tbody>
</table>

Adjust Operators

Once dimension or measure is added as a filter, you can select the appropriate operator for comparison with the operand. The valid operators are:

- Equal to
- Greater than
- Greater than or Equal to
- Between
- In List
- Is Null
- Matches Pattern
- Both
- Not Equal to
- Less than
- Less than or Equal to
- Not Between
- Not In List
- Is Not Null
- Different from pattern
- Except
There are many examples of how to use the various operators; here are just a few:

- You can look for data in a dimension or measure to be null or not null.

- You can look for multiple values in the dimension or measure by selecting the comparison operator of **In list**. When listing the values in the operand, separate each value with a semi-colon (;). When listing multiple values, it assumes an **OR** connection.

- You can look for all variations of **Greater than, Greater than or Equal to, Less than, or Less than or Equal to**.

- You can search for a range of information using the **Between** operator. When using the Between operator, the values are inclusive of the outer range numbers.

- You can look for a matching pattern using the **Matches pattern** operator. The wildcard option for pattern matching is the percent sign, %.

- You can look for a dimension or measure to contain two values for the same record.
Enter Operands

When entering operands, you have a couple of options.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>If you know the specific value you wish to use, you can simply type that value where it says to <strong>Type a constant</strong>.</td>
</tr>
</tbody>
</table>

This works well when you are looking for a specific number or pattern.

Instead of manually entering values on the right side, you can select from values that exist in your database.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the drop-down arrow next to the value field and select <strong>Value(s) from list</strong>. This opens the <strong>List of Values</strong> dialog box.</td>
</tr>
</tbody>
</table>

2. The criteria you are updating are listed at the top. You can select values from the list of options on the left side and push those values to the right side. As you do so, the query filter at the top is updated.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The top section of this dialog box displays the resulting query filter. The left-hand section displays all the possible values in the filtered dimension or measure. These values come directly from the database. To select a value, highlight it and click the right-facing arrow to move it to the right-side. You can also double-click the value to move it to the right-side. Add multiple values in the list by highlighting each one and using the right arrow to move each to the right side. Or, hold the CTRL key down while selecting multiple values and click the right arrow to move them all to the right at one time. For those dimensions or measures with a lot of data, you can enter a search pattern at the bottom on the left and click the <strong>Search</strong> button. This refines the list of potential values on which you can filter.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>When you've selected the appropriate values, click <strong>OK</strong> and the resulting query display in the Query Filters section.</td>
</tr>
</tbody>
</table>

**Activity**

Open the *yourintials Person Report*. Create a query that excludes those records without a Gender. Save your report as *yourintials Query Report*. 
Prompted Filters

Introduction

The purpose of this section is to provide you with the steps needed to create a prompted filter.

Prompt for Values

*Prompted filters* allow you to set up those objects on which you wish to filter but prompt the user to the specific values they wish to filter on when running the report.

Setting up a prompted filter is very similar to setting up a simple filter -- just click and drag the appropriate object into the *Query Filters* pane and select the appropriate operator.

However, instead of entering an operand or selecting an operand from the list, you need to click the *Filter Options* button and select *Prompt*.

Enter Prompt Text

When you change a filter to a prompt, the operand changes to the prompt text – the text the user sees when running the report. You can leave the default text or change the prompt text.

Remember, when working with delivered reports, change the value(s) of prompts to reflect data in your database environment. Delivered reports with prompts may contain value(s) that reflect data found in the database environment where the report was created.

Remove filter by right-clicking on it and clicking on Remove.
View and Modify Prompt Properties

When working with a prompted filter, you can specify the prompt properties.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the <strong>Prompt properties</strong> button next to the filter.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Prompt Properties" /></td>
</tr>
<tr>
<td>2</td>
<td>The <strong>Prompt</strong> dialog box displays.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Prompt Dialog" /></td>
</tr>
</tbody>
</table>

You can set options for your prompts in this dialog box such as identifying whether to keep the values previously selected or making the prompt optional. You can also set the default prompt values in this dialog box.
Complete the Prompt Properties Dialog Box

Once your filter is defined, each time you run the report, the Prompts dialog box displays allowing the user to enter the specific criteria.

The **Prompts** dialog box is similar to the **List of Values** dialog box in how you select and search for values.

Once the appropriate values are selected, click **Run Query** to display the report results.

Activity

Open the **yourinitials Query Report**. Remove the filter on Gender and enter a prompted filter for **Person Address State Desc**. Allow multiple input values. Run the query using the states of your choice. Save your report as **yourinitials Prompt Query Report**.
Complex Filters

Introduction

The purpose of this section is to provide you with the steps needed to create a complex filter.

Add Multiple Criteria

You often need to filter your report on data from more than one dimension or measure. When you do so, it's considered a complex filter. To build a complex filter, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Add your first dimension and set up your filter just as if it were a simple filter.</td>
</tr>
<tr>
<td></td>
<td><img src="Alumni_Graduate.png" alt="Image" /></td>
</tr>
<tr>
<td>2</td>
<td>Add your second component of criteria in the same way. When you drop the dimension or measure, it adds the filter connector which defaults to <strong>And</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="And.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Specify Filter Connections

An **And** condition means that the record must meet both pieces of criteria to be included in the results. In the example above, we are filtering for all Alumni – Graduates who are also Male.

To change the connector to **Or**, double-click the word **And** and it switches to **Or**.

![Image](Or.png)

This now states that we are looking for anyone who is an Alumni – Graduate, which could include males and females, or anyone who is male, whether he is an Alumni – Graduate or not.

The connector is a toggle so if you want to switch it back to **And**, simply double-click the word again.
### Group Filters

You may find instances where you need to group your criteria together. For example, you may wish to find:

- Alumni who are over 50 years old, OR
- Females who originated through Recruitment Activities.

Alumni are identified by the Source code of ALU. The origin code identifies people who came in through Recruitment Activities.

In order to accomplish this, you need the filter to be:

- Source equal to Alumni AND Age greater than or equal to 50, OR
- Gender equal to Female AND Origin equal to Recruitment Activities.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Add the various filters. As mentioned, the default connection is And.</td>
</tr>
</tbody>
</table>

```
And
Person Source   Equal to ▼ ALU
Person Age      Greater than or Equal to ▼ 50
Person Gender   Equal to ▼ F
Person Origin Code Desc   Equal to ▼ Recruitment Activities
```

| 2    | To create groupings of criteria, click-and-drag one of the filters over the other related filter. For example, the source and age criteria are related so you need to click and drag the **Age** dimension over the **Source** dimension. |

```
And
Person Age      Greater than or Equal to ▼ 50
```

You'll notice the look changes to indicate those two filters are linked within the overall query.
3. When you release the mouse, the two filters are now indented within the overall filter and have their own connection.

```
And
Person Source Equal to ALU
Person Age Greater than or Equal to 50
Person Gender Equal to F
Person Origin Code Desc Equal to Recruitment Activities
```

4. Repeat those steps until you have all the filters grouped appropriately.

```
And
Person Source Equal to ALU
Person Age Greater than or Equal to 50
Person Gender Equal to F
Person Origin Code Desc Equal to Recruitment Activities
```

5. Each group has its own connection (the default is And) which can be changed by double-clicking the connection word. Recall this toggles between And and Or.

In addition, there is an overall connection on the outside of all the filter groups. To change the overall connection double-click the word to toggle between And and Or.

```
And
Person Source Equal to ALU
Person Age Greater than or Equal to 50
Person Gender Equal to F
Person Origin Code Desc Equal to Recruitment Activities
```

**Activity**

Using the *your initials* Prompt Query Report, add the following filters: Those who have an age band between 20 and 50 years of age; exclude those without a gender value. Save your report as *your initials* Complex Query Report.

Before running a report in a “live” setting, remember to check for and remove any Limits placed on a report during the creation process.
Module 5: Organizing Data

Sort Results

Introduction

The purpose of this section is to provide you with the steps needed to sort your data.

Simple Sorts

You often need your data organized in an appropriate order to allow report readers to more easily find data. One method for organizing the data is to sort the results. This simply means you need to sequence a column or columns in ascending or descending order depending on the need. Follow these steps to sort the data.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the data in the column you wish to sort.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Person ID</th>
<th>Person Full Name</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000051</td>
<td>Gualtieri, Chris</td>
<td>Hispanic</td>
</tr>
<tr>
<td>0000215</td>
<td>La, Estrellita</td>
<td>Hispanic</td>
</tr>
<tr>
<td>0000224</td>
<td>Oyaas, Janet</td>
<td>Hispanic</td>
</tr>
</tbody>
</table>

2 You then have two options for sorting the data.

Option 1
Select the Properties tab.

Under the Sorts heading, select the appropriate sort option.
Option 2
Select the appropriate sort option using the Apply/Remove Sort button on the standard toolbar.

Sort in Multiple Columns

If you would like to sort your results based on data in multiple columns, you need to select the sort option in the same order in which you want the data sorted.

For example, you may want to sort your results primarily by gender and secondarily by name. Select gender and apply the sort first, then set the sort for name. Continue one-by-one process until sorting is complete.

To view the sort(s) in a report, select the table and expand the Sort section of the Properties tab.

Click the Detail button to view the Sort dialog where you can alter the sort priority and other sorting specifications.

Click Apply to see the sort results without closing the dialog.
Specify a Custom Sort Order

In some cases, you may wish to sort your data in an order other than ascending or descending (such as by order of importance). In these cases, you can define a custom sort order.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the data in the column on which you wish to set a custom sort order.</td>
</tr>
<tr>
<td>2</td>
<td>Select the drop-down arrow next to the <strong>Apply/Remove Sort</strong> button and select <strong>Custom sort</strong>.</td>
</tr>
<tr>
<td>3</td>
<td>Highlight a value and drag into the new order position in the custom sort order list or use the Up and Down arrows to move the value.</td>
</tr>
</tbody>
</table>

![Custom Sort Window](image)
By default, sort list values display to reflect the order applied to the report.
You may know of other possible values that will eventually be in the data. In this case, you can add additional values to the list by entering the value in the Temporary values field and clicking the right arrow to add the value to the list.

The new value displays in italics. It can then be moved up and down the list as any other value.

Click the **Sort** button and select ascending or descending for the custom sort order.
To remove a custom sort, you must access the Sort dialog and click the Delete Custom Sort button.

**Activity**

Using the *yourinitials Prompt Query Report*, sort your report by **Person Address State Desc**, then by **Person Address Zip**. Access the Sort dialog box via the Properties tab and alter the order. Add **Person Address City** to the sort. Again, alter the order through the Sort dialog. Save your report as *yourinitials Sort Report*.
Breaks

Introduction

Breaks allow you to create a visual separation of data in your report. This grouping of data makes seeing each segment easier.

The purpose of this section is to provide you with the steps needed to apply breaks to your resulting data.

Add Breaks to Report Results

To add a break, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the data in the column you wish to segment your data.</td>
</tr>
<tr>
<td>2</td>
<td>Click the Insert/Remove Break button.</td>
</tr>
</tbody>
</table>

The data is now separated into sections based on the data in the column you had highlighted.

You do not have to sort your data before breaking the data. Also, the break column does not have to be the first column in a table, but the report may be easier to interpret if it is the first column.
Set Break Properties

When you set a break, you can modify the properties to improve the look and feel of how the resulting data is displayed.

To view the break properties, you must have the data in the column highlighted. The properties display under the Properties tab and the Breaks section.

Activity

Using the yourinitials Prompt Query Report, move Person Age Band to the first column position and break the data on that column. Change the break properties so the break footer does not display. Uncheck the Remove duplicate values property. What is the result? Re-check that option. Center the break values across the break.

Save the document as yourinitials Break Report.
Sections

Introduction

The purpose of this section is to describe the difference between sections and breaks and provide you with the steps needed to set sections in your report.

Sections vs. Breaks

*Sections* are another way to create a visual separation of data in your report. However, there are a couple of differences between breaks and sections.

Sections move the data from the body of the table and into a separate heading above each group of data. Breaks do not include a heading, the data remains in the body of the table.

Sections include summary data (such as counts and totals) for each section. Breaks do not automatically include any summary data for the groups.

You need to decide which option works best depending on your report requirements.

Add a Section

To add a section, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the data in the column you wish to segment.</td>
</tr>
<tr>
<td>2</td>
<td>Right-click the column and select <em>Set as Section</em>.</td>
</tr>
</tbody>
</table>

Notice the data no longer displays in the body of the table but a new section heading is created.
Activity

Open the *yourinitials Query Prompt Report*. Section the report on the *Person Address State Desc* dimension. Run the report and be sure to include three or more values to the prompt (to better illustrate sections).

Save the document as *yourinitials Section Report*.

In Edit Report mode, click on the Map tab of the Data Manager Pane. Use the links to navigate through the report.
This page is blank intentionally.
Module 6: Formatting

Data

Introduction

The purpose of this section is to provide you with the steps required to format the data in your reports.

Options for Changing Fonts

Changing the fonts on a Web Intelligence document is comparable to changing the font in Microsoft Excel or other similar tools.

When formatting your text, consider the output. You want to make sure to display the data in a format that is readable in the output medium of the report.

For example, if you are displaying the results online (rather than on paper), use a sans-serif font which is better for on-screen viewing. Or, if you are displaying the results via a web browser, do not use the underline option as people may think it is hyperlinked.

Once you decide the medium for the output, there are two methods of changing the font:

- Use the Formatting toolbar.
- Use the Text Format options on the Properties pane.

In both cases, you need to highlight the data in the column you wish to change.

When you are working with fonts, you can change the font style, size, color, and other properties.
Use the Formatting Toolbar

Once the data you want to change is highlighted, click the drop-down arrow next to the **Font Style** option on the Formatting toolbar and select the appropriate font style.

You can also select the font size.

You can adapt the style to indicate whether you want to bold, italicize, and/or underline the data.

You can also change the color of the font.

Selecting More Colors opens the color palette allowing you to create any color you like.

You can also change the alignment, left-to-right, and top-to-bottom, using the Formatting toolbar.
Use the Properties Tab

You can manage all the formatting via the Properties tab as well. You may need to expand the Appearance section and the Text Format section.

You can make the same changes to the column headings as long as the column heading is highlighted -- instead of the data.
Alter Cell Properties

Each cell, column heading or data column, has a set of additional properties that can be modified when the cell is highlighted. These properties display on the Properties tab.

For example, you can set a column to Autofit width based on the data in the column. This means that data is not cut off due to lack of space. You can also create fixed width columns by setting the width.
Pages

Introduction

The purpose of this section is to provide you with the steps required to format the pages of your report.

Set Page Margins

While there are many options for formatting your page, one of the most common changes is to set the page margins. To do so, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click anywhere in the report outside of the data tables and text blocks.</td>
</tr>
<tr>
<td>2</td>
<td>Click the <strong>Properties</strong> tab. The tab now reflects the page properties.</td>
</tr>
<tr>
<td>3</td>
<td>Expand the <strong>Page Layout</strong> section.</td>
</tr>
<tr>
<td>4</td>
<td>Adjust the margins based on the Measurement Unit you set as a user preference.</td>
</tr>
</tbody>
</table>

**General**
- Name: Report 1
- Document Properties: File Section Report

**Appearance**

**Page content (Quick Display Mode only)**

**Page layout**
- Top margin: 0.79 "
- Bottom margin: 0.79 "
- Left margin: 0.79 "
- Right margin: 0.79 "
- Page size: A4
- Page orientation: Portrait
Add Headers

In the same section, you have the option for showing the page header. This is information that displays at the top of every page of the report.

Consider adding standard information to your report header such as the report date, report time, report title, institution logo, and so forth.

Please note that we cover how to add variables, such as the current date, in a later section.
Add Footers

You also have the option for showing the report's footer.

Again, consider adding standard information to your report footer such as the page number or total number of pages.

Please note that we cover how to add variables, such as the page number, in a later section.

Activity

Open the *your initials Person Demographic Report* (created in Module 2). What formatting alterations can you make so the report displays properly in a PDF format?

Recall the questions you wrote as a part of this exercise. Which of those questions now have answers? Are there any questions without answers. Share with the class questions you have not answered to this point.
This page is blank intentionally.
Module 7: Formulas and Variables

Definitions

Introduction

The purpose of this section is to define and differentiate formulas and variables.

Formula

A formula is a calculation that occurs only once in a document.

Use a formula when you do not need to repeat the syntax in a document. Note that you can convert a formula into a variable if you decide you need a variable later.

Variable

A variable is an object that can be used multiple times in a single document (such as in a table and a graph) without having to recreate the syntax.

Use a variable when you want to perform the same calculation multiple times in a report. You can add the variable as you would add other objects in your report.
Aggregations

Introduction

The purpose of this section is to describe how to aggregate data in a Web Intelligence report.

Ways to Summarize Data

In Web Intelligence documents, you have a variety of ways to summarize data quickly and efficiently. You can:

- Sum measures and numeric data.
- Count rows.
- Average measures and numeric data.
- Find the minimum value.
- Find the maximum value.
- Calculate a percentage for measures and numeric data.

To summarize data, use the Insert Sum/Insert Count button from the Standard toolbar.

If you highlight a column with a measure or numeric data, the button appears as $\sum$.

If you highlight a column with a dimension containing non-numeric data, the button appears as $\text{count}$.

Add Summary Data to Tables

To add a summation to a table, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the data in the column you wish to summarize.</td>
</tr>
<tr>
<td>2</td>
<td>Click the drop-down arrow next to the Insert Sum button and select Sum.</td>
</tr>
</tbody>
</table>
The sum appears at the bottom of the report in the column you highlighted.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Sum:</strong> 21</td>
</tr>
</tbody>
</table>

Summary Data for Sections

Once you have created sums, you can section your report. When you do so, the report automatically creates sums, sub-totals, for each section of the report.

Activity

Create a copy of the *yourinitials Prompt Query Report* and name it *yourinitials Count Report*. Open this report and add a count on the Person ID to the table. Scroll to the bottom of the report to confirm the count. Select the cell displaying the count of Person ID values. Apply a top border to the cell. Save the report. Set a Break on Gender. What happens to the Count? Take the Break off and create a Section on Gender. What happens to the Count cell? Save the report. In your opinion, what would make this a better report? What might help the value displayed in the Count cell?
Formulas

Introduction

The purpose of this section is to demonstrate the steps necessary to create formulas in your Web Intelligence document.

Options for Free-Standing Cells

Web Intelligence documents can contain free-standing cells. These are single cells that can be added anywhere in the report. You can enter text or a formula in these cells. In addition, there are several pre-defined cells you can use to display specific information, such as page numbers.

To view the available free-standing cells, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the Templates tab in the Data Manager pane.</td>
</tr>
<tr>
<td>2</td>
<td>Expand Report Elements.</td>
</tr>
<tr>
<td>3</td>
<td>Expand Free-Standing Cells.</td>
</tr>
</tbody>
</table>

Some commonly used Free-Standing cells, include:
- “Blank Cell” used to enter text or a formula.
- “Last Refresh Date” to display last refresh date.
- “Document Name” displays the document name.
Add Free-Standing Cells to Reports

To add free-standing cells into your report, simply click and drag it from the Templates tab into the report.

Carefully consider in which section of the report you place the free-standing cell. For example, you may wish to place the page number cell in the report footer section.

By default, free-standing cells are formatted with a bottom boarder to better identify their location in the document. A number of formatting options are available for free-standing cells.

When positioning Free-Standing Cells, consider using the “Lasso Technique” (left-click and drag to touch each cell) to select multiple cells.

Once selected, use the Align button to position the cells.

Activity

Open the yourinitials Count Report. Add Page Number/Total Pages to the report footer. Add a Blank Cell near that cell and enter text to explain the page value.

To the report header, add the Last Refresh Date cell and a Blank Cell and enter "Last RefreshDate" as the text. Resize and position cells as necessary.

Save the report as yourinitials Formula Report.
Formula Toolbar

You can create formulas in any existing cell in your report. Use either the Formula toolbar or the Formula dialog box. To display the Formula toolbar, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the Show/Hide Formula Toolbar button on the Reporting toolbar.</td>
</tr>
</tbody>
</table>

The toolbar displays at the top of your report.

The buttons on the toolbar include (from left to right):

- Open the formula dialog box.
- Create a variable based on your formula.
- Cancel your changes.
- Check your formula syntax.
- Enter the formula syntax.

Use the Formula toolbar when you know the exact syntax of the formula.

If you do not know the syntax, you can use the Formula Editor.
Formula Editor Dialog Box

Another method for building formula syntax uses the Formula Editor dialog box.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Access the Formula Editor dialog box by clicking the Formula Editor button (fx) in the Formula toolbar.</td>
</tr>
</tbody>
</table>

The Formula Editor dialog box displays.

Use the Formula Editor dialog box when you don't know the exact syntax. You can use the options in the bottom of the dialog box to build your syntax.

Activity

Open the yourinitials Formula Report. Select the cell displaying the count of Person ID values. Click on the Formula Tool Bar button. Review the formula that displays. Does the syntax look familiar to you? If so, where have you seen or used similar syntax?

Close the report.
Add User-Entered Data

One common example of a formula is displaying the data the user entered in the report prompts. However, you may want that information combined with the report header.

For example, you may wish to display:

![Example Data](image)

To make this change, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the report header. ![Report Title]</td>
</tr>
<tr>
<td>2</td>
<td>Click the <strong>Formula Editor</strong> button. ![Formula Editor Icon]</td>
</tr>
</tbody>
</table>
| 3    | Enter or build the syntax for the formula. In this example, the syntax is: 

```
"Demographics for the Ethnicity: " + UserResponse("Enter value(s) for Person Add Address State Desc: ")
```

Instead of text, you are now creating a formula. The formula must start with an `=` sign.

The text you want to display "Demographics for the Ethnicity: " is a literal and, as such, must be in double quotation marks.

The concatenation symbol is the `+` sign.

UserResponse is a system-defined function available under the Functions section in the Data Provider folder. The literal text passed into the function is the exact same text as appears in your prompt.
You can then click **OK** and your syntax is checked to ensure it is correct.

By default, Count is distinct, that is only unique items are counted. If you need a count of all items, that is duplicate values, then add the **All** argument to the Count syntax:

```
=Count([Person Gender]; All)
```

**Activity**

Open the *yourinitials Formula Report*. Create a Report Title that displays the value entered via the user’s response. Be sure to use the exact prompting text defined to the filter and to check the syntax. Run the report for a single **Person Address State Desc** value.

Run the report again for multiple **Person Address State Desc** values.

Save the report using the same name.

How did the report title change? Did this report provide information you find useful? Why or why not?
Variables

Introduction

The purpose of this section is to demonstrate the steps necessary to create variables in your Web Intelligence document.

Change an Existing Formula into a Variable

You can create formulas and later change them into variables.

Recall that a formula is simply a calculation that occurs once in a document. A variable is a document object that can be used multiple times, such as in a table and a graph, without having to recreate the syntax.

To change an existing formula into a variable, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the cell where your current formula exists.</td>
</tr>
<tr>
<td>2</td>
<td>Click the Create Variable button on the Formula toolbar.</td>
</tr>
<tr>
<td>3</td>
<td>Complete the Create Variable dialog box. Typically, you simply need to enter a name for your new variable.</td>
</tr>
<tr>
<td>4</td>
<td>Click OK.</td>
</tr>
</tbody>
</table>

Your new variable is now available in the list of dimensions and measures you can add to your report on the Data tab. You can now add this measure anywhere in your document.
For example, you may want to highlight the number of sections in each department by displaying the section count to the right of the table.

Click and drag the Section Count measure to the right of the table.

Now the calculated value of the variable displays.
Create a New Variable

If you would like to create a variable from scratch, instead of from an existing formula, follow these steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the <strong>Variable Editor</strong> button on the Reporting toolbar.</td>
</tr>
<tr>
<td>2</td>
<td>This opens the <strong>Variable Editor</strong> dialog box where you can enter the details of your new variable.</td>
</tr>
<tr>
<td>3</td>
<td>Click <strong>OK</strong>. The variable displays in the <strong>Data</strong> tab.</td>
</tr>
</tbody>
</table>

When you validate your syntax, it may change the Qualification to match the type of data you are using in your formula.

![Variable Editor dialog box](image)
Click and drag the variable to place it in the report.

If you would like to add a phrase, such as Section Count, in front of the number, change your formula to:

```
"Person Count: " + Count([Person ID])
```

To remove a formula or variable from your table, first you must delete the syntax from the Formula toolbar and click the Validate button.

While not a requirement, consider a naming convention for variables created for a report, e.g. use a “V_” as a prefix. Such a naming convention helps distinguish between measures defined to the class and variables created for the report.

If you notice you are creating the same variables in many different reports, your technical staff has the option of adding variables to the universe as a global variable. Once it is added to the universe, it is available for everyone to use. Consult with your technical staff about creating global variables.

**Activity**

Open the *yourinitials Formula Report*. Create a variable that counts the Person ID dimension. Check the syntax. Drag the variable and place it along the right side of the report. Add the text "Person Count" to the display. Refresh the data. Save the report as the *yourinitials Variable Report*.
This page is blank intentionally.
Module 8: Data Blocks

Types of Data Blocks

Introduction

A data block is a segment of data in your report and can come in a variety of formats including tables and graphs.

The purpose of this section is to provide you with descriptions of the types of data blocks available.

Tables

Tables include:

- Vertical tables created when you build a report — column names across the top and records in each row.
- Horizontal tables where each heading is a row and the data is displayed horizontally across the page.
- Crosstab tables where summary data is displayed at the intersection of two data fields -- similar to Pivot Tables in Microsoft Excel.
- Form tables where each record is displayed separately with headings and the data.

Graphs

Graphs include:

- Bar charts -- vertical, horizontal, 3D, and with lines.
- Line graphs -- stacked, mixed, vertical, and horizontal.
- Area charts -- stacked, percent, vertical, horizontal, and percent.
- Pie charts -- regular, doughnut, and 3D.
- Radar graphs -- line, stacked, polar, and scatter.

You can have multiple data blocks in a single report to display data in a variety of ways that will make sense to your audience.

You also have the option to represent data on multiple tabs in a single Web Intelligence document.
Tabs

Introduction

The purpose of this section is to illustrate the use of tabs in a Web Intelligence document. In addition to having multiple data blocks on a single report, multiple reports can exist within a single Web Intelligence document.

Use Tabs to Manage Data

Similar to Microsoft Excel, you can have multiple tabs in a single document. Each tab in a document is considered a report.

To add a tab, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right click the tab and select <strong>Insert Report</strong>.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Insert Report" /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Rename Report" /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Duplicate Report" /></td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Delete Report" /></td>
</tr>
<tr>
<td>2</td>
<td>This creates a blank report.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Report 1 and Report 2" /></td>
</tr>
<tr>
<td></td>
<td>Double-click on the tab to rename the report.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Report 1 and Crosstab" /></td>
</tr>
</tbody>
</table>

Notice that a **Duplicate Report** option is available too. This creates an exact copy of the original.

Activity

Open the **yourinitials Variable Report**. Add a New Report tab. Name the new report tab **Crosstab**. Save the report with **yourinitials Crosstab Report**.
Tables

Introduction

The purpose of this section is to identify the types of tables and add and change data blocks in your Web Intelligence report with the various types of tables.

Types of Tables

The four types of tables are:
- Vertical tables
- Horizontal tables
- Crosstab tables
- Form tables

Modify Existing Tables

If you would like to change the type of table, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the <strong>Templates</strong> tab.</td>
</tr>
</tbody>
</table>

Select the **Templates** tab.

<table>
<thead>
<tr>
<th>Data</th>
<th>Templates</th>
<th>Map</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Elements</td>
<td>Report</td>
<td>Tables</td>
<td>Horizental Table</td>
</tr>
</tbody>
</table>

| 2    | Click and drag the new table type from the **Templates** pane over the table. |

Click and drag the new table type from the **Templates** pane over the table.
The report is changed to the new format.

<table>
<thead>
<tr>
<th>Person ID</th>
<th>0000218</th>
<th>0000239</th>
<th>0000241</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Full Name</td>
<td>Wi, Erin</td>
<td>Appler, Annabel</td>
<td>Berg, Laura</td>
</tr>
<tr>
<td>Person Age Band</td>
<td>41-50</td>
<td>26-30</td>
<td>26-30</td>
</tr>
<tr>
<td>Person Address City</td>
<td>Downey</td>
<td>Sun City</td>
<td>San Diego</td>
</tr>
<tr>
<td>Person Address State</td>
<td>California</td>
<td>California</td>
<td>California</td>
</tr>
<tr>
<td>Person Address Zip</td>
<td>90241</td>
<td>90705</td>
<td>94301</td>
</tr>
</tbody>
</table>

**Duplicate an Existing Table**

In some cases, you may want to duplicate a table, or any data block, because you want to set up multiple data blocks based on the same data. For example, you may want to display a table and a graph side-by-side and both contain the same data—just different visual formats.

To duplicate an existing table or data block, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hover over the table until a gray outline appears. Right-click the data block and select <strong>Copy</strong>.</td>
</tr>
<tr>
<td>2</td>
<td>Position your cursor where you want the new data block to display.</td>
</tr>
<tr>
<td>3</td>
<td>Right-click and select <strong>Paste</strong>.</td>
</tr>
</tbody>
</table>
Create a New Table

In some cases, you may want to include only specific items in a table or other data block. While you can work with a duplicate table and remove or add items, there are times when starting with a blank report is easier.

Add objects to a new report by following the following the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click and drag the objects you want represented in the new report.</td>
</tr>
<tr>
<td>2</td>
<td>Click and drag the data block to represent data of that report.</td>
</tr>
</tbody>
</table>

View Table Properties

There are many properties you can modify in your table – all are available on the Properties tab. You must have the table selected to view its properties. The first section, General, allows you to rename the table. This may be helpful if you have multiple tables displayed on the same report.
The Display section allows you to select what information displays such as headers and the object name.

The Appearance section allows you to modify the formatting (fonts and backgrounds) for the header cells, body cells, and footer cells. In addition, you can modify the look of the alternating rows and columns.

The Page Layout section includes parameters related to page breaks and what displays on each page.
The Breaks section allows you to identify the break priority. Use this option when you have multiple breaks and need to identify which break comes first.

Activity

Open the yourinitials Crosstab Report. On the Crosstab report tab, add Person Address State Desc and Person Gender dimensions. Add the variable, e.g. V_Person Count, created in the previous module. Apply a Crosstab table representation. Center the crosstab values vertically and horizontally.

Refresh data for a single Person Address State Desc value. View the results. Refresh data using multiple Person Address State Desc values.

Select the data portion of the crosstab table (the Person count). Add a Sum to the table.

Save the document with the same name.

Thinking about your position responsibilities, how might this functionality prove beneficial?
Graphs

Introduction

The purpose of this section is to identify the types of graphs and add and change data blocks in your Web Intelligence report with the various types of tables.

Types of Graphs

The types of graphs available in Web Intelligence are:

- Bar charts
- Line graphs
- Area charts
- Pie charts
- Radar graphs

You need to consider which type of graph works best depending on the type of data you wish to display.

Convert Tables into Graphs

There are a couple of ways you can convert an existing table into a graph.

The first option is to click and drag the appropriate graph type from the Templates tab over the existing table.

The other option is to right-click the table and select Turn To.
This option opens the Turn To dialog box. Across the top of this dialog box are tabs representing each of the types of data blocks available. When you select a tab, you then can select the specific type of graph you'd like to create.

Using either option results in your table turning into a graph.
Change the Type of Graph

You can follow the same steps to change your graph to a different type.

This is helpful if you are unsure of the best option for presenting the data. You can change the graph easily until you find an appropriate format.

Change the Graph Structure

Sometimes when you change a table to a graph you find you want to change the structure -- what fields are used where.

You can do so by selecting the graph and clicking the View Structure button on the Reporting toolbar.

This opens the structure of the graph where you can change the fields used to calculate the graph results.

For example, if you need to switch the Course Level and Department, you can click and drag the Course Level and release it over the Department. This switches the fields -- similar to how they were switched on the Crosstab table.

To see the results, click the View Results button on the Reporting toolbar.
The table structure is updated based on your changes.

View Graph Properties

You have the option to modify the properties of the graph by selecting the graph and clicking the Properties tab.

The General section is where you can name the data block.

Use the Display section to change the general look and feel of the graph, especially when working with empty data.
The Appearance section allows you to change the look of all the details in the graph.

Use the Page Layout section to manage how the page breaks occur relative to the graph.
Use the Sorts section to manage the sort priority.

Activity

Open the *your initials* Crosstab Report. Copy the crosstab table and paste it underneath the crosstab table. On the copy, use either the “drag and drop” or “left-click and Turn To” method to display data as a Vertically Grouped Bar Chart.

Select the bar chart and use the Properties tab to add a legend. Show the data values over the bars in the chart. Alter the labels of the X and Y Axis so they are user-friendly.

The resulting chart should look similar to this:

![Bar Chart Example]

Review the structure of the crosstab table. Switch positions of the dimensions in the crosstab.

If you have time, make a copy of the crosstab and remove the sum column and row. Turn the graph into a Vertical Stacked bar chart. Label each axis and provide a legend.

Save the report as *your initials* Graph Report.
This page is blank intentionally.
Module 9: Alerts and Rankings

Alerts

Introduction

The purpose of this section is to describe alerts and how to apply them to your report.

Definition

An alert is a function you can set to highlight whether certain targets have been met or not. This is similar to conditional formatting in Microsoft Excel. You can set an alert to highlight a cell by:

- Text format
- Cell border format
- Cell background format

Alerts are also referred to as alerters.

Create and Apply a Simple Alert

To create an alert, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the Alerters button on the Reporting toolbar.</td>
</tr>
<tr>
<td>2</td>
<td>In the Alerters dialog box, click New.</td>
</tr>
</tbody>
</table>
3 In the **Alerter Editor** dialog box, define the parameters of the alert as well as the formatting to occur if the alert conditions are true.

![Alerter Editor dialog box](image)

The Alerter name is a user-friendly name for the alert so it can be more easily referenced.

The Description allows you to enter user-friendly details about what the alert is doing.

Under the **Sub-Alerter** section, you define the criteria of the alert. You can select fields in your report to compare with other fields and/or literal values. If the condition is met, the alert is triggered.

4 Click the **Format** button to define the formatting to apply if the sub-alerter condition is true.

5 When you are done completing the **Alerter Editor** dialog box, click **OK** to return to the **Alerters** dialog box.

![Alerters dialog box](image)

6 Click **OK**.
Apply the alert to any column or cell in the report or multiple columns or cells.

View the results.

<table>
<thead>
<tr>
<th>Name</th>
<th>Age Band</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nwanne, Angela</td>
<td>51-61</td>
<td>F</td>
</tr>
<tr>
<td>Esmond, Maria</td>
<td>21-25</td>
<td>F</td>
</tr>
</tbody>
</table>
Create an Alert with Multiple Conditions

You can have multiple sub-alerters, multiple conditions that are checked within a single alert. This allows you to apply different formatting depending on the magnitude of the condition.

For example, you can set up a variable that highlights the Age Band column in different ways depending on the value of the cell.

In your report, you'll see your formatting applied to those records where the condition was met.

You can use the Properties tab to apply or remove alerters to column(s).

A single alert can have up to six conditions. A single alert can have up to eight sub-alerts. Business Objects officially supports up to 30 alerts in a Web Intelligence document.
Activity

Using the *yourinitials Variable Report*, create and apply an alert using the **Person Age Band** dimension. Create a compound filter for this alert using your data, e.g. **Person Age Band** Less than or Equal to 26-30 And **Person Address State Desc** Equal to (select a state value from the presented list). Place the alert on the **Person Full Name** dimension.

If time allows, create a sub-alert of your choice for that dimension. View the results. Save the document using *yourinitials Alert Report* as a name.
Rankings

Introduction

The purpose of this section is to describe alerts and how to apply them to your report.

Definition

*Rankings* are a way of limiting the records that display based on the top or bottom records and a value you specify.

For example, you can apply a ranking to a GPA field to find the top 10 people by GPA and display only those 10 records. Or you can calculate the ranking based on a percentage so you could find the top 5% based on GPA.

As another example, you can locate the top 50 people by donation amount. Or the top 5% by donation amount.

You can also look for records with the lowest or bottom numbers. For example, you may want to find five (5) departments with the lowest budget. Or find the lowest 5% of department budgets.

Another example is you would like to find the five (5) people with the fewest number of vacation hours left. Or the 10% of people with the fewest vacation hours.

Rankings require the use of a measure. This can be either a measure defined to the class or a variable created as a measure defined to the document. The measure must be in the block upon which the ranking is applied.
Apply the Ranking

To apply a ranking, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select what you wish to rank – the entire report or by section. If ranking by section, make sure you select the section table and not the header.</td>
</tr>
<tr>
<td>2</td>
<td>Click the drop-down arrow next to the Apply/Remove Ranking button on the Reporting toolbar and select Add Ranking.</td>
</tr>
<tr>
<td>3</td>
<td>Complete the Rank dialog box.</td>
</tr>
</tbody>
</table>

Check the box next to Top or Bottom depending on whether you're looking for the top or bottom records.
In the Based on field, select the field on which you wish to base the ranking.

If the Calculation mode is set to "Count" or "Cumulative Sum," enter the number of records you want to display next to the Top or Bottom field.

If the Calculation mode is set to "Percentage" or "Cumulative Percentage," enter the percentage of records you want to display next to the Top or Bottom field.

4 Click OK.

Your report displays only those records that match the ranking criteria.

<table>
<thead>
<tr>
<th>Section Name</th>
<th>Section Division 1 Desc</th>
<th>Section Minimum Enrollment</th>
<th>Section Active Student Count - Distinct</th>
<th>Section Capacity - Distinct</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN-100-01</td>
<td>Division of Humanities</td>
<td>10</td>
<td>10</td>
<td>360</td>
</tr>
<tr>
<td>GERM-108-01</td>
<td>Division of Humanities</td>
<td>10</td>
<td>10</td>
<td>360</td>
</tr>
<tr>
<td>SPAN-100-01</td>
<td>Division of Humanities</td>
<td>10</td>
<td>14</td>
<td>360</td>
</tr>
</tbody>
</table>

Notice the value of both cells.

Highlight the table and apply a ranking so that only the top two values display based on the value of the variable and using the count calculation mode.

Activity

Open the yourinitials Alert Report. Insert a new report tab. Create a vertical table with Person Address State Desc and the Person ID count variable. Sum the values in the variable column. Drag the variable field so it displays near the table. Your report should look similar to this:

<table>
<thead>
<tr>
<th>Person Address State</th>
<th>Person Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>46</td>
</tr>
<tr>
<td>District Of Columbia</td>
<td>7</td>
</tr>
<tr>
<td>Washington</td>
<td>6</td>
</tr>
<tr>
<td>Connecticut</td>
<td>4</td>
</tr>
<tr>
<td>Texas</td>
<td>64</td>
</tr>
</tbody>
</table>
Examine the results. What happened to the value of sum cell in the table? What happened to the value displayed in the variable cell? What is going on with the value of these two cells? What could be done to put these values into a more specific context?

Save the report as *yourinitials Ranking Report*. 
This page is blank intentionally.
Module 10: Organizing Documents

Overview

Introduction

The purpose of this section is to describe the two methods for organizing documents in InfoView.

Folders and Categories

There are two ways in which objects are organized in InfoView: by folders and categories.

- **Folders** are where the Web Intelligence documents are actually stored.
- **Categories** allow you to make intuitive representations of these organizations.

For example, you may have a Web Intelligence document defined to a specific folder but is categorized in several ways.

Folders and categories can be either **public** -- also called corporate -- or **personal**.

- **Public** folders and categories can be seen by any InfoView user who has the necessary rights, and you can only add or edit objects in them if you have the necessary rights to do so.
- **Personal** categories or your My Favorites folders are for your use; you can create new folders and categories and arrange objects within them as you wish. These are private and cannot be seen or altered by other InfoView users, although your SAP BusinessObjects Enterprise administrator can edit them if necessary.

InfoView also includes a messaging system which allows you to send objects or shortcuts to objects to other users. You can send objects from the Document List as you browse.

To view objects that have been sent to you, go to the Document List and click **My Inbox**.
Folders

Introduction

The purpose of this section is to provide you with a review of organizing your documents using folders.

Create a Folder

Earlier in class, you learned how to create a new folder. As a reminder, to create a new folder, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Access the Document List.</td>
</tr>
<tr>
<td>2</td>
<td>Highlight the folder under which you wish to create your new folder.</td>
</tr>
<tr>
<td>3</td>
<td>Click the drop-down arrow next to the <strong>New</strong> button and select <strong>Folder</strong>.</td>
</tr>
<tr>
<td>4</td>
<td>Enter the name of the new folder and click <strong>OK</strong>.</td>
</tr>
<tr>
<td>5</td>
<td>The new folder displays.</td>
</tr>
</tbody>
</table>

Assign or Move Documents to Folders

You also learned how to manage documents in folders.

To add a new document to a folder, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select the folder when you save the document.</td>
</tr>
<tr>
<td>2</td>
<td>Enter the name of the document in the Name field.</td>
</tr>
<tr>
<td>3</td>
<td>Click OK.</td>
</tr>
</tbody>
</table>

To move a document to a folder, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Navigate to the document and highlight the document name.</td>
</tr>
<tr>
<td>2</td>
<td>Click the drop-down arrow next to the <strong>Organize</strong> button and select <strong>Copy</strong>.</td>
</tr>
<tr>
<td>3</td>
<td>Navigate to the new folder and highlight it.</td>
</tr>
<tr>
<td>4</td>
<td>Click the drop-down arrow next to the <strong>Organize</strong> button and select <strong>Paste</strong>.</td>
</tr>
<tr>
<td>5</td>
<td>The report is now in the new folder.</td>
</tr>
</tbody>
</table>
If you copy the document, it exists in the old and new folder. You can use **Cut** instead which removes it from the old folder when you paste it into the new folder.

You can also delete a document by highlighting it and selecting **Organize > Delete**.

As well as look at the contents of a folder.

### View Documents in a Folder

Throughout the class, you have been working in the My Favorites folder, the folder created for this class, as well as viewing documents in the Datatel Sample Reports folder.

To view documents in any folder, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Navigate to that folder in the tree.</td>
</tr>
<tr>
<td>2</td>
<td>Highlight the folder. The documents display in the right pane.</td>
</tr>
</tbody>
</table>

Documents are defined to a Folders. Folders provide a physical location for documents. In addition to this physical organization, InfoView provides a way to logically organize documents.

Think about a manual. Throughout a manual, you're introduced to terms. Like a document defined to a folder, those terms are defined within the manual. If you want to see all the places where those terms are referenced, you can look in the index at the back of the manual. In the index, you see listing of terms and the pages where that term is found. An index is a means to logically organize all those terms and offer easy access to where each is used.

In much the same way, an InfoView Category provides a logical organization for Web Intelligence documents.
### Categories

#### Introduction

Documents are defined to Folders. Folders provide a physical location for documents. In addition to this physical organization, InfoView provides a way to logically organize documents.

The purpose of this section is to provide you with details for organizing your documents using categories.

#### Create a Category

To create a new category, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Access the Document List.</td>
</tr>
<tr>
<td>2</td>
<td>Click the <strong>Switch to Categories</strong> button.</td>
</tr>
<tr>
<td>3</td>
<td>Click the area under which you'll create the new category.</td>
</tr>
<tr>
<td>4</td>
<td>Click the drop-down arrow next to the <strong>New</strong> button and select <strong>Category</strong>.</td>
</tr>
</tbody>
</table>
5. Enter the new category name and click **OK**.

![Create Category](image)

Enter a new category name: **Curriculum**

The new category now shows in the list of categories available.

![Category List](image)

**Assign Categories to Documents**

To add a category to a document, follow these steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the document name.</td>
</tr>
</tbody>
</table>

![Highlight Document](image)

| 2    | Click the drop-down arrow next to **Actions** and select **Categories**. |

![Select Categories](image)
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The list of possible categories displays. You may need to expand a section -- such as Personal Categories. Highlight the appropriate category.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Category tree" /></td>
</tr>
<tr>
<td>4</td>
<td>Click <strong>OK</strong>.</td>
</tr>
</tbody>
</table>

You can delete documents from folders. If you do so, you are deleting the actual report. You can also remove a category from a report. However, this is removing the logical representation; the document still exists in the appropriate folder.
View Documents in a Category

To view documents in a specific category, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Switch to the Categories view by clicking the <strong>Switch to Categories</strong> button.</td>
</tr>
<tr>
<td>2</td>
<td>Navigate the categories tree in the same way you would navigate through folders to find your report.</td>
</tr>
</tbody>
</table>

Remember that a report can be assigned multiple categories so you may see it more than once as you navigate through the various categories.

**Activity**

Create the following Personal Categories:
- Filters
- Sorts Sections Breaks
- Formulas and Variables
- Graphs and Charts
- Alerts and Rankings

Assign the Web Intelligence documents you created during the activities of this class to the corresponding Category.

Thinking about your position responsibilities, what Categories might you create to help organize and access your Web Intelligence reports?

Review your question sheet again. What questions, if any, remain unanswered? Share those with the class.
This page is blank intentionally.
Module 11: Sharing Documents

InfoView Inbox

Introduction

The purpose of this section is to provide you with ways in which you can share documents with other InfoView users using the InfoView Inbox.

When to Use the InfoView Inbox

Each person has an Inbox in InfoView. You can use this Inbox as an e-mail inbox.

You can see your Inbox in the list of folders on the Document List.

You can schedule and send reports to your inbox or another user's inbox making it easier for people to locate reports once they have been run.

Send a Report to an InfoView Inbox

To send a document to an InfoView inbox, follow these steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the document name.</td>
</tr>
</tbody>
</table>
2 Click the drop-down arrow next to the Send To button and select Business Objects Inbox.

3 Complete the parameters for sending the document to an inbox. If the parameters are not displayed, uncheck the Use default settings box.

Use the middle section to identify to whose inbox you are sending the document.

The Target Name is equivalent to the Subject line. You can use an automatically generated name — which is the document name plus a random number — or specify a name.

You also have the option of sending the document as a shortcut or as a copy.

4 Once you have entered the parameters, click Submit.

The document displays in the recipient’s Inbox.
The recipient can then right-click the document and select View to display the report.

When the user opens the document, the report is not refreshed automatically. The document is sent based on the last refresh date.

For the user to refresh the data, he needs to click the Refresh Data button.

This is one of the reasons why it is recommended that you display the last refresh date on the report.

You do have the option of indicating that you would like the report to refresh each time it is opened in the Document Properties. However, this is not the default setting.

**Activity**

Send a document to your own Infoview Inbox. If there are others attending this class from your institution, send a document to their Inbox.
Schedule Reports

Introduction

The purpose of this section is to provide you with ways in which you can schedule reports to run and automatically send the results to other InfoView users and people not using InfoView.

When to Schedule Reports

Your implementation of Web Intelligence as a part of Datatel’s Reporting and Operating Analytics uses an Operational Data Store (ODS) as its source of information. Recall an ODS contains a snapshot of your transactional database, that is the values of the ODS are static. Typically, the ODS tables are refreshed each night. To ensure your Web Intelligence reposts have the latest information, be sure to schedule your report after the ODS is refreshed.

Check with your IT Office to learn when the ODS refresh completes. Schedule reports after that time.

Schedule and Send a Report

You have the option for scheduling a report to run at a pre-defined time and on a consistent basis while sending the results to another user's InfoView Inbox.

To schedule a report to run, follow the steps below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highlight the document.</td>
</tr>
<tr>
<td>2</td>
<td>Select the drop-down arrow next to <strong>Actions</strong> and <strong>Schedule</strong>.</td>
</tr>
</tbody>
</table>
Complete the scheduling parameters.

For the **Instance Title** section, enter the title of the instance. An *instance* is a specific occurrence of the report being run. For example, you may schedule the report to run on September 30 so you may add `0930` at the end of the instance title so you know it was the instance run on September 30.

Under the **Recurrence** section, specify when and how often you wish the report to run.

If the report has any prompts, you need to specify what data to use for the prompts. Click the **Modify** button to display the prompt and select the appropriate options.

In the **Formats and Destinations** section, you can specify the format of the resulting output and where you want that output to go once run.
4 Click the **Schedule** button when you have completed the parameters.

The report now runs based on your scheduling parameters.

When emailing a Web Intelligence document, consider using either the Microsoft Excel or Adobe Acrobat Output formats as these applications are very common and in wide use.

If you use the Web Intelligence Output Format, then only those persons with access to InfoView and, as a result, Web Intelligence, can view the report.
Module 12: Conclusion

Next Steps

Introduction

This course has provided the fundamental steps for building Web Intelligence documents. Before releasing the tool to all users, there are some decisions that need to be made about the structure and use of the Web Intelligence tool.

Decisions

One of the biggest decisions you'll need to make (or it may have already been made) is the structure of your public folders and categories in InfoView. This impacts the way you find reports but also what reports you and other users can access. In addition, you'll need to define your own folder and categories structure for your My Favorites folder and personal categories.

Consider creating a report specifications template. Use this template as a way for users to request a report and all the details about the report. The report developer can use those specifications to create the final product. Having a report specifications template helps facilitate the conversation between the user and the report developer.

You may also decide as an office or as an institution to create a template for your Web Intelligence reports. This allows you to predefine certain information in the report such as the logo, report title, page number placement, last refresh date placement and so forth. Consider whether this would be helpful and work with your technical staff as needed.

Once you have these standards in place, create a list of high-priority reports. Use this list to begin practicing how to create Web Intelligence documents. Remember it's always better to start with an easier example and work your way up to more complex needs.

As you create reports, keep a list of items you cannot find in the universe. Recall that the universe is just a subset of your Colleague database so not all elements may exist in the universe. Work with your technical staff to define addition elements that need to be added to the ODS tables and the universe.
Additional Services

Introduction

Additional services are available if you are interested in learning more about using Colleague.

Courses

There are a number of courses available that further enhance the information presented in this course. To view Datatel's Education Catalog:

1. Log into Datatel's Clients Only website (clients.datatel.com).
2. Select Training & Education.
3. Select Education Catalog.

Some specific courses to consider are:
- Crystal Reports Fundamentals
- DataOrchestrator ODS Overview
- Research Fundamentals

In addition to courses offered by Datatel, you can register for self-paced courses offered by BusinessObjects. Some specific courses to consider are:
- BusinessObjects Dashboard Manager: Designing Dashboards
- BusinessObjects: InfoView Essentials
- BusinessObjects Web Intelligence Advanced Report Design

Web Demonstrations

There are a variety of web demonstrations available free of charge on Datatel's Clients Only website (clients.datatel.com). To access the web demos:

1. Log into Datatel's Clients Only website.
2. Select Support Resources.
3. Select On-Demand Web Demos.
4. Select User Interface from the Demo Categories on the left.
5. Select the web demo of interest to you.

Some specific web demonstrations to consider are:
- A Technical Look at DataOrchestrator ODS
- Ask the Client: Reporting and Operating Analytics at Lake Land College
- Ask the Client: Westmont College on the Strategy of a Reporting Solution
- Better Business Intelligence = Smarter Decisions
- Datatel Dashboards
- Datatel Dashboards – Chief Financial Office
• Datatel Dashboards – Admissions Director
• Datatel Dashboards – Assistant Director of Financial Aid
• Datatel Dashboards – Bursar
• Datatel Dashboards – Controller
• Datatel Dashboards – Director of Residence Life
• Datatel Dashboards – FA Loan Specialist
• Datatel Dashboards – Registrar
• Datatel Dashboards – VP of Enrollment Management
• Datatel Reporting and Operating Analytics
• From Ad-Hoc to Dashboards: The Power of Datatel Reporting and Operating Analytics
• Getting Started with Business Objects: The Basics of Changing the Universe

Consulting

You can also request one-on-one consulting with Datatel's Professional Services team. To request an onsite or remote consulting, send an email to services@datatel.com.
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