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Try Instant Template-Based Analysis

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Introduction to Instaview

With Instaview, you can access, transform, analyze, and visualize data without having extensive experience designing business analytics solutions or staging databases. Instaview gives you immediate access to your data so you can quickly explore different ways to structure and present your data as a complete business analytics solution. In addition to extracting and loading the data, Instaview gives you the ability to manipulate the data to make it fit your specific needs from within one simple tool.

When you create an Instaview you

- Create a new data source from which to extract and transform your data.
- Create a data model to define how columns and fields relate to one-another.
- Create an Analyzer Report with tables and charts from your transformed data.

Don't have time to mess around?

Once you have started Instaview, follow the tutorial using the sample data provided, beginning with the [Creating a New Instaview](#) section.

To examine the interface and controls, see the [Navigating The Instaview Interface](#) sections.

If you began while already within Pentaho Data Integration, you can access Instaview anytime by selecting [the Instaview perspective button on the toolbar](#).

- [**What is Instaview?**](#)
- [**Tour Instaview**](#)

What is Instaview?

An Instaview file is made up of a data transformation, a relational model of your data, and analysis reports to present your data using tables and charts.

- A data integration transformation enables you to extract, transform, and load your data to and from multiple sources or formats.
- A metadata model enables you to select how your data is related to provide a view on all of the combined data.
- Visualize your data by presenting it as tables, charts, maps, or diagrams.

Transform your data with Pentaho Data Integration

Transforming your data enables you to explore the information about your business and turn it into insight to help you make information-driven decisions. The process is known as Extract, Transform, and Load, or ETL. **Extract** refers to the process of *reading data* from a source system. **Transform** is the process of *changing the data* from its original form. **Load** refers the process of *writing the data* into another target system. Between extracting and loading you can manipulate your data in many ways--such as sorting, aggregating, pivoting, splitting, calculating, or validating--so it fits specific needs.

To learn more about Pentaho Data Integration, refer to the section called Get Started with DI.

Visually explore your data using Pentaho Analyzer

Visualize your data in Instaview with the Analyzer canvas (Pentaho Analyzer), an interactive graphical interface for exploring and visualizing your transformed data. Instaview presents your data multi-dimensionally and enables you to select which parts of your data to explore and how to display your analysis.

When Instaview connects to the specified data source, it analyzes the data to identify measures and dimensions. **Measures** are the quantitative values within your data and are numerical. **Dimensions**, also called Levels, are categorical labels that identify or provide context to measures within your data. Analyzer Reports can be organized by category and sorted in many ways. You can categorize data alphabetically, by number value, by names and categories, and by time. With advanced configuration nearly all of the dimensions and measurements can be configured to fit complex data challenges.

To learn more about Pentaho Analyzer, refer to the section called Get Started with Analyzer Reports.

Supported formats and data sources

Instaview comes with pre-configured templates that give you instant connectivity to the most popular data sources.

- **Local Files** - Load existing Excel spreadsheets or CSV files.
- **Relational Databases** - Working with JDBC compliant databases in Instaview enables you to analyze your data even without in-depth knowledge of how your database is structured.
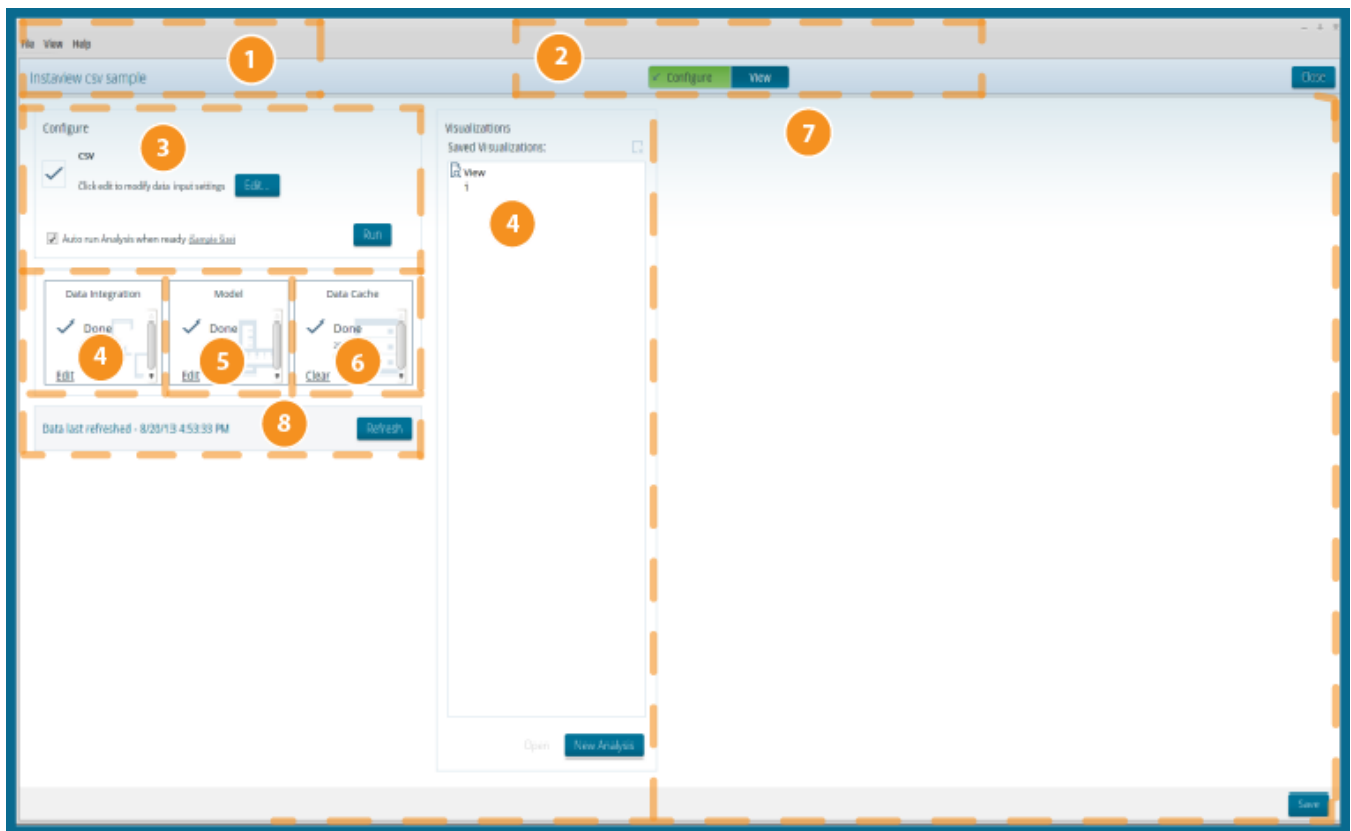- **Big Data** - Cassandra, Hadoop, Hive, or MongoDB are easily integrated.

Tour Instaview

After you have finished installing Pentaho Business Analytics, start Instaview as described in Start and Stop PDI Design Tools and Utilities.
Within **Configure** mode you can access and modify an Instaview's underlying configuration details.

- Configure the data source settings
- Clear the data cache
- Open, delete, or rename existing views
- Create new Views
- Run or refresh the Instaview data
- Clear the data cache

The advanced actions allow you to customize your Instaview for more specific use cases, but require a more technical understanding of Pentaho Data Integration, Data Sources, and Metadata.
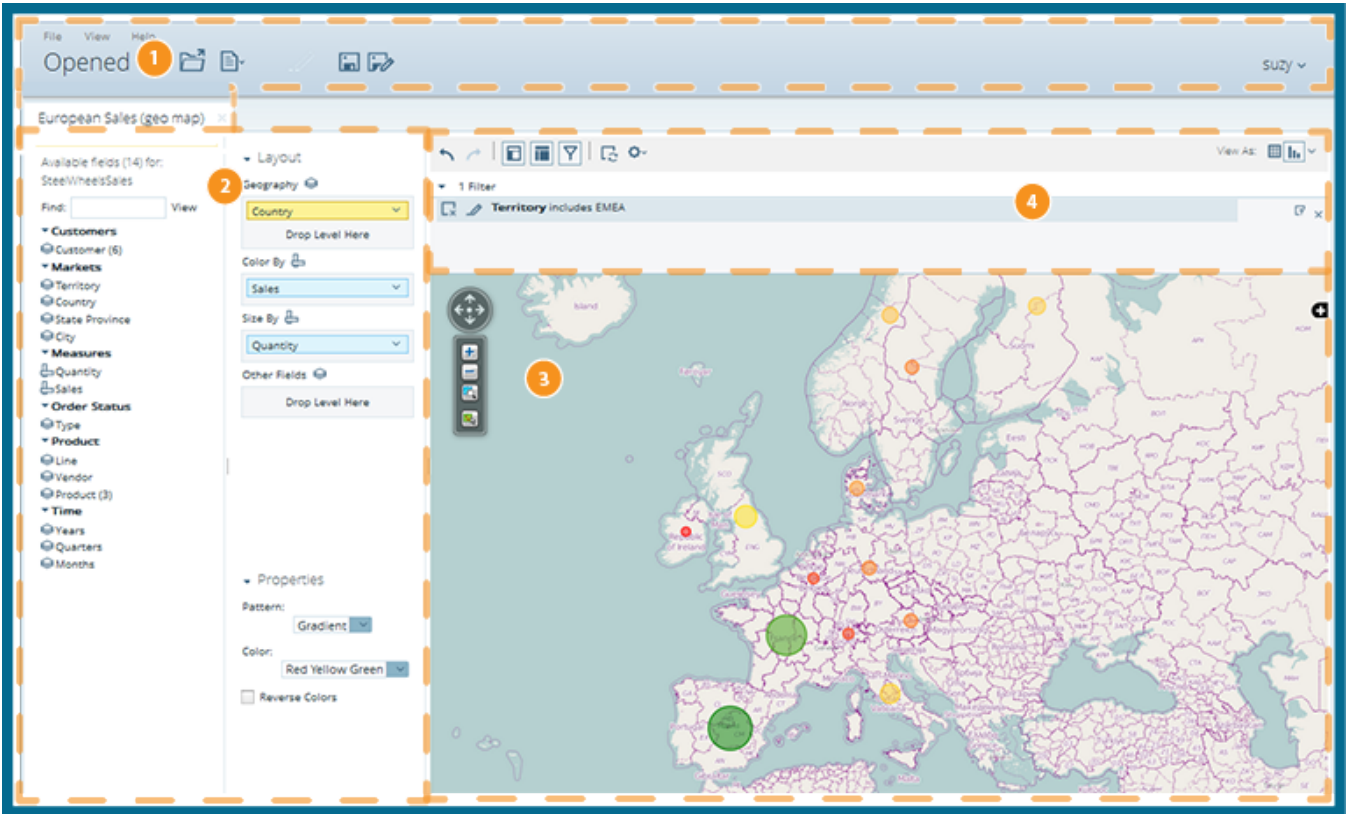
- Switch to the full Pentaho Data Integration transformation perspective
- Launch the model perspective

Component	Description
1 - Instaview	A combination of a valid data connection, a data integration transformation, a metadata data source template, and one or more Analyzer reports. You can only have one Instaview at a time.
2 - Configure View	The Configure/View mode toggle allows you to switch between Cofigure mode and View mode. • Configure mode enables you edit a data connection, data integration transformation, metadata data source template, and Analyzer report. It also provides the means to clear the Data Cache. • View mode enables you to create reports and visualizations from a valid Instaview data source. From within this view you can drag and drop fields from (measurements or dimensions) your data onto the Reporting canvas.
3 - Configure data source panel	• The Edit button takes you to the data connection dialog and allows you to edit the data connection settings for the current Instaview. • The Auto run Analysis when ready option, if checked, will automatically create a new Analyzer report after pressing Run. • The Run button lets you manually start the Instaview data transformation. Pressing Run will modify the data integration transformation or metadata model if changes were made within the Configure panel, if necessary.
4 - Data Integration panel	Provides the means to access and edit the data integration transformation for the current Instaview. Editing will open the Data Integration perspective in PDI.
5 - Model panel	Enables you to edit the metadata model for the current Instaview. Editing will open the Model perspective in PDI.
6 - Data Cache panel	Provides the means to clear the data cache.
7 - Visualizations panel	Displays existing Views and provides the means to open existing, create new, and delete Instaviews. You can also rename an existing visualization by right-clicking an item within this panel.
8 - Refresh display	Displays when the current Instaview was last run. If your data is connected to a live data source this displays the last time the data was accessed by Instaview. The Refresh button provides the means to manually refresh the current Instaview.

Instaview embeds Analyzer Reports for the **View** mode. Within **View** mode you are able to drag and drop data onto the Analyzer canvas to interactively explore your data. Instaview offers many ways to visually display data, such as maps, charts, and grids. You may have multiple views open for editing at a time, but you may only have one Instaview open at a time.

The **View** mode has the same layout as Pentaho Analyzer. You can briefly tour Analyzer here or find out more about Analyzer in Use Pentaho Analyzer.

Item	Name	Function
1	**Opened** view	Displays quick access buttons across the top to create and save new Analysis reports, Interactive reports, and Dashboards. Opened reports and files show as a series of tabs across the page.
2	**Available Fields** and **Layout** panels	Use the **Available Fields** and **Layout** panels to drag levels and measures into a report. Your report displays changes in the **Report Canvas** as you drag items onto the **Layout** panel. Delete a level or measure from your report by dragging it from the Layout panel to the trashcan that appears in the lower right corner of the **Report Canvas**.
3	**Report Canvas**	Shows a dynamic view of your report as you work to build it. The look of your report changes constantly as you work with **Available Fields** and **Layout** panels to refine it.

Item	Name	Function
		The **Report Canvas** shows different fields based on the chart type selected.
④	**Analyzer Toolbar** and **Filters**	Use the **Analyzer Toolbar** functions to undo or redo actions, hide lists of fields, add or hide filters, disable the auto-refresh function, adjust settings, and change the view of your report. Use the **Filters** panel to display a list of filters applied to the active report, or edit or delete filters.

Using Instaview

To begin creating a new Instaview, from the Welcome screen click **Create New**. The New Data Source gallery appears.

- [Connecting to Data in Instaview](#)
- [Creating an Analyzer Report in Instaview](#)
- [Correcting Data Quality Issues in Instaview](#)
- [Clearing and Refreshing the Data Cache in Instaview](#)
- [Adding a Filter in Instaview](#)
- [Creating Visualizations in Instaview](#)
- [Using Conditional Formatting in Instaview](#)

Connecting to Data in Instaview

Connecting to a data source in Instaview requires you to select the format of the data to analyze and configure how to connect to the source files. These instructions show you how to connect to the provided sample comma delimited text file (CSV), `sales_data.csv`.

1. From the `--check--`New Data Source gallery click the **Local File** tab, then **CSV**. Click **OK**. The **CSV Input** dialog box appears.

2. In the **Step Name** field, type **Read Sales Data**. This is the name of the new data source connection.

3. In the **Filename** field, click **Browse** to locate the source file, `sales_data.csv`, available at `...\design-tools\data-integration\samples\transformations\files`.

4. Click **Get Fields** to retrieve the input fields from the source file. A dialog box appears requesting that you to specify the number of lines to scan. Once the fields from the source file are retrieved, this dialog box also enables you to specify settings for the fields, such as their format, length, and precision.

5. Type **0** (zero) in the **Number of Sample Lines** text fields to scan all the lines of data. By scanning all lines, you ensure Instaview reads the entire contents of the file and you reduce the possibility of errors that could impede the connection.

6. Click **OK** and the summary of the scan results appears. Once you are done examining the scan results, click **Close** to return to the **CSV Input** dialog box.

   Your CSV Input dialog box will look like this.

Updated: Mon, 16 Jun 2014 19:44:07 GMT

#	Name	Type	Format	Length	Precision	Currency	Decimal	
1	ORDERNUMBER	Integer	#	15		$	.	
2	QUANTITYORDERED	Integer	#	15		$	.	
3	PRICEEACH	Number	#,#	15		$	.	
4	ORDERLINENUMBER	Integer	#	15		$	.	
5	SALES	Number	#,#	15		$	.	
6	ORDERDATE	Date	MM/dd/yyyy			$	.	
7	STATUS	String		10		$	.	
8	QTR_ID	Integer	#	15		$	.	
9	MONTH_ID	Integer	#	15		$	.	

7. Click **OK** to begin processing the data. You briefly see the processing screen while Instaview creates a connection to the data source, a data transformation, and a metadata model.

Instaview reads data from the specified sample file, then brings you to `--check--`View mode . See Creating an Analyzer Report in Instaview for instructions on using this sample data to create an Analyzer Report.

Creating an Analyzer Report in Instaview

View mode in Instaview enables you to interactively explore data by creating Analyzer Reports. You display data on the Analyzer canvas as a table or chart. If you are not already, change to View mode by clicking **View** on the Configure mode switch at the top of the interface.

These instructions explain how to create an Analyzer Report with a table that displays Sales categorized by Country and sorted from highest sales to lowest sales.
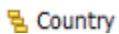
1. From theAvailable fields panel on the left, select the measure **Sales**

   Sales
   and place it on the Analyzer canvas on the right.

   A table with a column labeled **Sales** appears with only one cell.

2. From theAvailable fields panel , select the level **Country**

   Country
   and place it on the Analyzer canvas .

Country	Sales
Australia	630,623
Austria	202,063
Belgium	108,413
Canada	224,079
Denmark	245,637
Finland	329,582
France	1,110,917
Germany	220,472
Hong Kong	48,784
Ireland	57,756
Italy	403,626
Japan	188,168
New Zealand	535,584
Norway	307,464
Philippines	94,016
Singapore	115,499
Singapore	172,990
Spain	1,215,687
Sweden	210,014
Switzerland	117,714
UK	478,880
USA	3,627,983

3. Sort the table by Sales, from highest to lowest, by right-clicking on the **Sales** column header and selecting **Sort Values High to Low** from the menu.

Country	Sales
USA	3,627,983
Spain	1,215,687
France	1,110,917
Australia	630,623
New Zealand	535,584
UK	478,880
Italy	403,626
Finland	329,582
Norway	307,464
Denmark	245,637
Canada	224,079
Germany	220,472
Sweden	210,014
Austria	202,063
Japan	188,168
Singapore	172,990
Switzerland	117,714
Singapore	115,499
Belgium	108,413
Philippines	94,016
Ireland	57,756
Hong Kong	48,784

You now have an Analyzer Report with a table that displays sales data categorized by country and is sorted from highest sales to lowest sales.

Correcting Data Quality Issues in Instaview

Review the table you created using the procedures in Creating an Analyzer Report in Instaview. Do you notice a problem with the quality of the data? Within the table is a record for **United States** and a record for **USA**, each with separate sales figures.

This is a data quality issue. Within an organization, acceptable data quality is crucial to the reliability of business analytics reporting. The way data is entered, stored, and managed can have an impact on data quality. Maintaining data quality requires going through the data periodically and scrubbing it. Typically this involves updating, standardizing, and removing duplicating records to create a single view of the data.

Follow these instructions to correct the data quality issue.

1. Click **Configure** on the **Configure mode switch** at the top. You are now in **Configure mode** .
2. In the **Data Integration** panel, click **Edit**. An alert dialog box appears warning you that making changes to the transformation could cause your Instaview to no longer work as you expect. This brings you to the Data Integration perspective.
3. Right-click the **Input** step from the flow and choose **Detach step**.
4. In the **Design** tab on the left, under the **Transform** folder locate the **Value Mapper** transformation step and drag it onto the canvas on the right, in-between the **Input** and **Do Not Edit** steps.
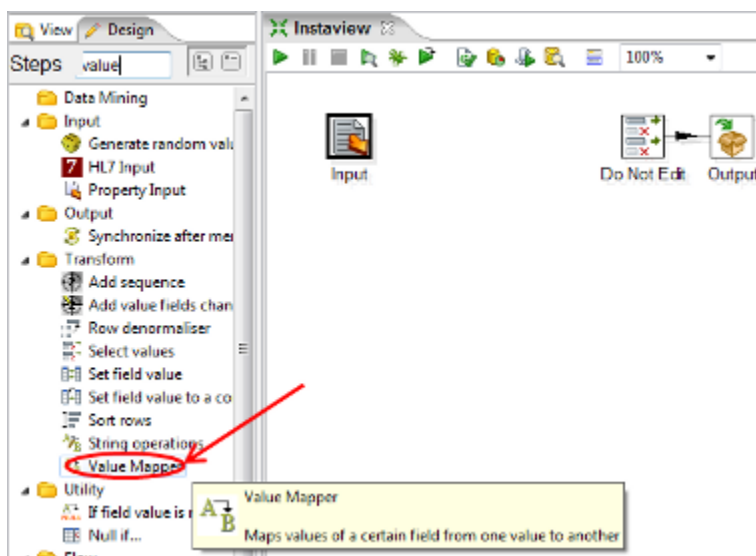
5. Press **CNTRL** and select the **Input** step then the **Value Mapper** step. Then right-click on either step and select **New Hop** from the menu.

   A dialog box appears. Confirm the **From step** is **Input** and the **To step** is **Value Mapper**, then click **OK** to create the new hop.
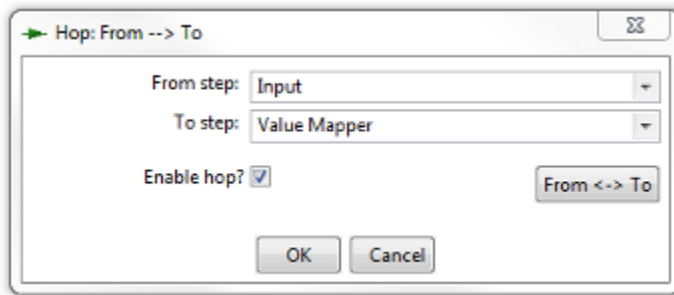
   Repeat this step to create another hop from the **Value Mapper** step to the **Do Not Edit** step.

6. Configure the **Value Mapper** step by double-clicking it.

   a. For **Fieldname to use**, select **COUNTRY** from the drop-down list.

   b. For **Source Value**, enter **USA**.

   c. For **Target value**, enter **United States**.
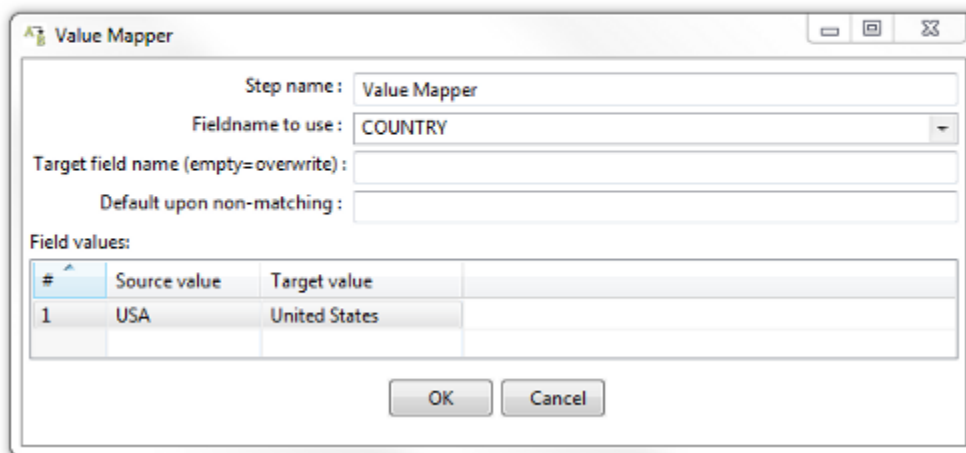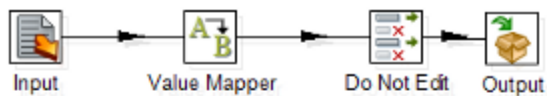
7. Save the transformation by clicking the save icon

   .

8. Run the transformation by click the Run icon

   .

   The transformation runs successfully, indicated by green check marks in the upper-right corner of each step.

9. Switch back to the Instaview perspective by clicking **Instaview** on the **Perspective** toolbar.

You are now back in Configure mode and you configured the transformation to join the duplicate fields. To verify the changes took affect in View mode, you must first clear and refresh the data cache from within Configure mode. See Clearing the Data Cache in Instaview for instructions clearing and refreshing the data cache, and confirming the data quality issue was corrected.

Clearing and Refreshing the Data Cache in Instaview

Configure mode provides you access to the configuration details of an Instaview. If you are not already, change to Configure mode by clicking **Configure** on the Configure mode switch at the top of the interface.

The data cache in Instaview stores your transformed data so that future requests for that data can be served faster. When you make changes to the underlying transformation of an Instaview--like you did following the [Correcting Data Quality Issues in Instaview](#) tutorial--you need to clear and refresh the data cache to ensure the changes you made take affect when you begin reporting within View mode again. These instructions explain how to clear and refresh the data cache in Instaview.

1. Clear the data cache by clicking **Clear** in the **Data Cache** panel. A dialog box confirms the data cache was cleared successfully and the **Data Cache** panel reads **Data Cached Cleared**.
2. Refresh the data by clicking **Refresh** in the **Refresh** display. The **Data Cache** panel shows it is processing, and once completed returns you to View mode .

Confirm the data was corrected by selecting **Country**

🖳 Country

from the Available fields panel and placing it on the Analyzer canvas . Review the data and verify the repeated dimension was consolidated.

Adding a Filter in Instaview

If you are not already, change to View mode by clicking **View** on the `--check--`Configure mode switch at the top of the interface.

Filters are used to restrict or limit the data that is presented in a report.

These instructions explain how to filter a report by territory, an existing field within the `--check-`-Available fields panel , to only display sales data from countries in the Europe, the Middle East and Africa (EMEA) territory.
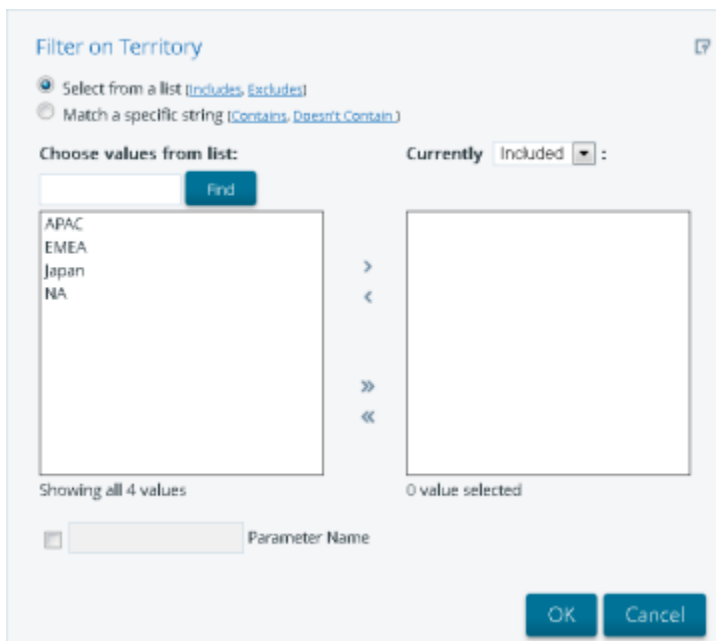
1. Click the **Add a filter** button to the left of the report title

   ▽

   .

   The Filer workspace appears at the top of the report.

2. Filter the report by territory by dragging **Territory** from the `--check--`Available fields panel on to the filter workspace.

   The **Filter on Territory** dialog box appears with values associated with the **Territory** field.

3. Select **EMEA** from the list of values and click **Add Selected**

   >

   . **EMEA** appears with a green check mark in the panel on the right. Click **OK**.

   The report displays only data for the **EMEA** regions and the **Filter** workspace displays **Territory includes EMEA** and indicates there is one filter in use.

Creating Visualizations in Instaview

Visualizations, such as graphs, charts, maps, and grids, graphically display data to convey a message. Instaview offers many ways to visually display data using the `--check--`Analyzer canvas . To create a visualization in Instaview you first need to create a data table by placing measures and dimensions within the Available fields panel on to the `--check--`Analyzer canvas . Once your table has the information you want to display, select a chart from the Chart type menu by pressing the Chart type drop-down arrow

on the Analyzer toolbar.

- [Creating a Chart in Instaview](#)
- [Creating a Geographic Map in Instaview](#)

Creating a Chart in Instaview

If you are not already, change to View mode by clicking **View** on the `--check--`Configure mode switch at the top of the interface.

These instructions explain how to create a chart that displays the top-ten EMEA Countries by Sales, which requires using a filter to determine the top-ten sales regions by sales and creating a chart to display the data.

1. Filter the table to display the top-ten countries by sales by right-clicking on the **Country** header, then selecting **Top 10, etc**.
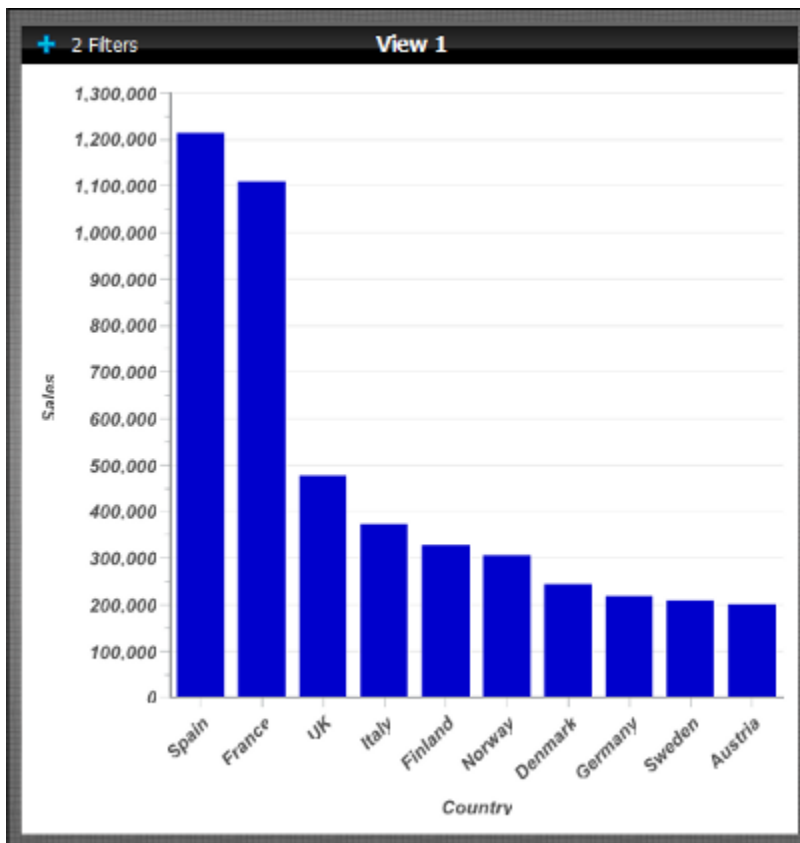
   The **Numeric Filter** dialog box appears. Leave the default settings then click **OK**.

2. Switch the format of the report by clicking the Chart type drop-down arrow

   then select **Stacked Column**.

A stacked column chart appears and displays only the top-ten EMEA countries by sorted sales.

Creating a Geographic Map in Instaview

If you are not already, change to View mode by clicking **View** on the `--check--`Configure mode switch at the top of the interface.

Geo maps enable you to visualize data on a geographic map. This visualization type will plot a pin on a map based on the location attribute used. You can then use a measure to color-code the pen and/or use a measure to specify the size of the pin. If your model has geographic annotations then the location information will be retrieved by the geoservice automatically.

These instructions explain how to create a geographic map of the top-ten European territories grouped by sales, with indicator size relative to a country's amount of sales.

1. Change the format of the report by clicking the drop-down arrow next to the Switch to chart format button

   then select **Geo Map**.

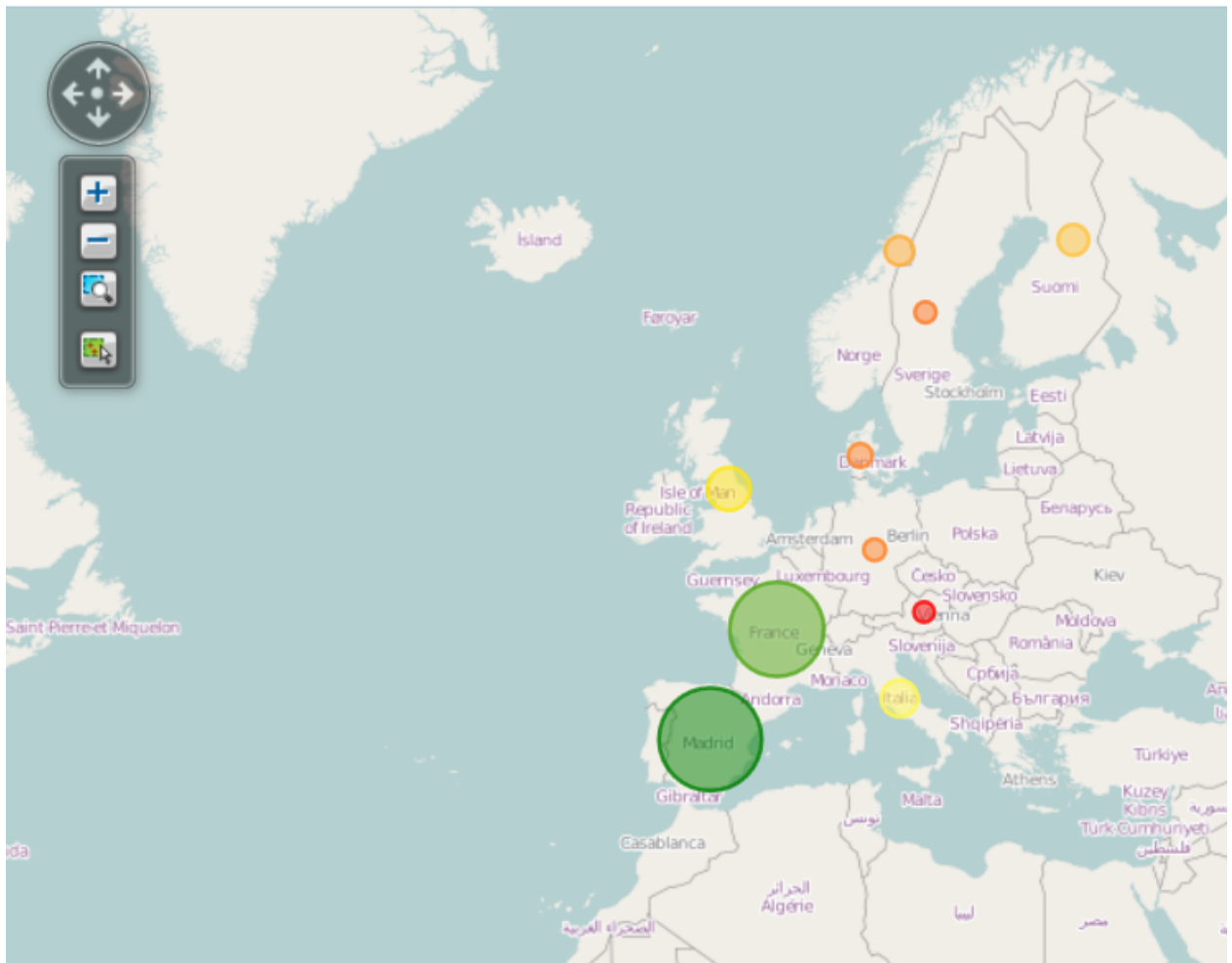   The sales data for the EMEA territories is now represented across a map and is coloring indicative of a country's amount of sales.
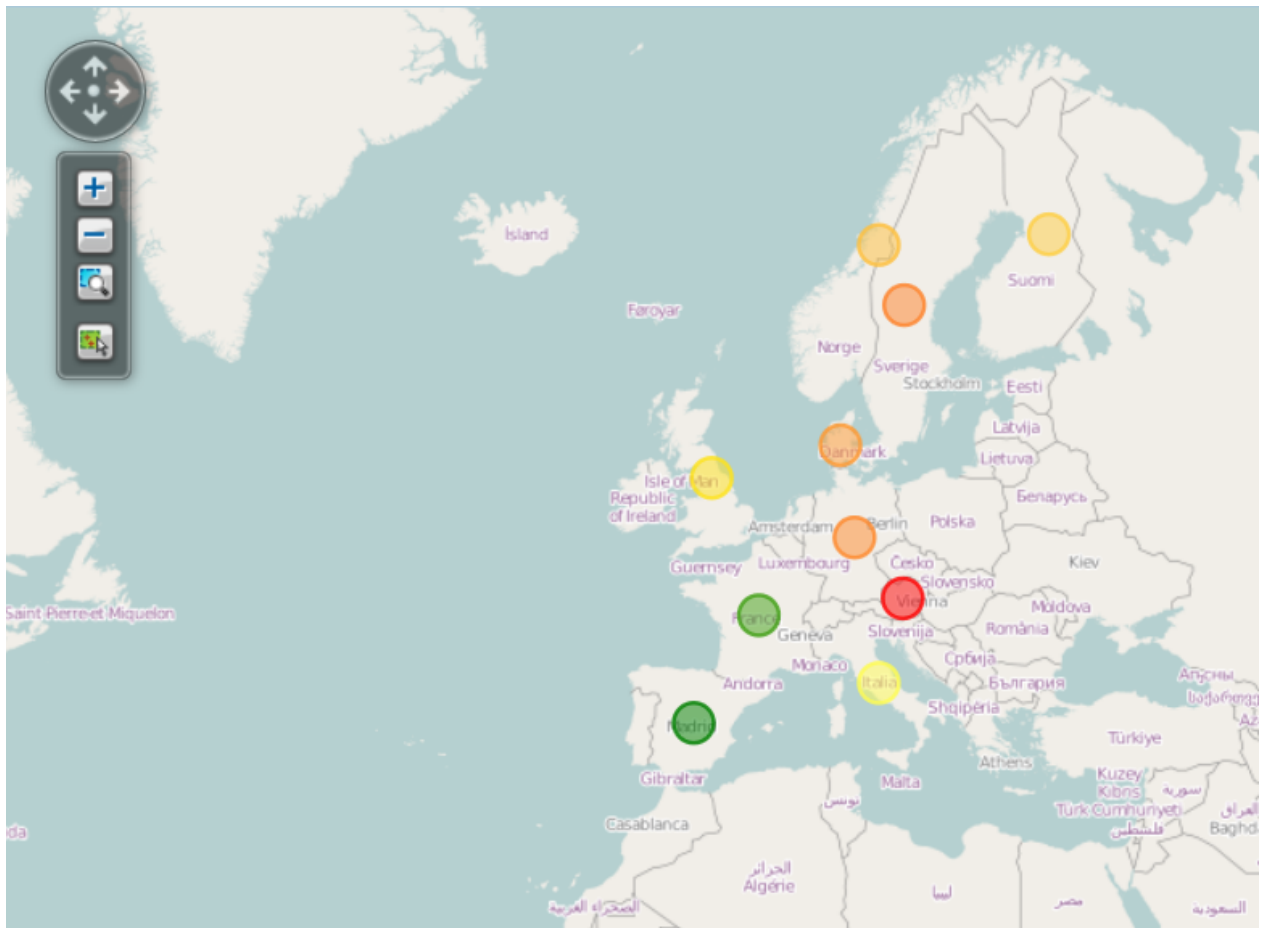
2. Make the indicators sized by sales and color-coded by quantity ordered by placing the **Sales** field to the **Size By** field, then select **Quantity** from the **Available fields** panel and place it on in the **Color By** field in the `--check--`Layout panel.

Using Conditional Formatting in Instaview

If you are not already, change to View mode by clicking **View** on the `--check--`Configure mode switch at the top of the interface.

Applying conditional formatting means that cells will be physically affected by the data they contain, and that formating depends on user-defined thresholds. Conditional formatting can help create relational contrast when you display your data.

These instructions explain how to implement data bars, a method of conditional cell formatting for numeric data. Conditional formatting with data bars draws a bar in each cell whose length corresponds to the value of the cell relative to the other cells in the selected range. If you have not already, switch the Analyzer Report to table format by clicking the Switch to table format button.

Switch to data bar format by right-clicking the **Sales** column, then select **Conditional Formatting** > **Data Bar: Green-Yellow-Red** from the sub-menu.

The table refreshes with green data bars within the cells of the Sales column, relative to the total amount of sales for the top-ten EMEA countries grouped by sales.

Country	Sales	Quantity
Spain	1,215,687	12,429
France	1,110,917	11,090
UK	478,880	5,013
Italy	403,626	4,045
Finland	329,582	3,192
Norway	307,464	2,842
Denmark	245,637	2,197
Germany	220,472	2,148
Sweden	210,014	2,006
Austria	202,063	1,974

Configuring an Existing Instaview

Once you create an Instaview, you might want to change some of the settings configured during the initial steps in which you connected to the source data. Or perhaps you would like to create an additional Instaview Analyzer Report using the current Instaview data. These sections describe how to adjust the data source connection, transformation, metadata model, clear the data cache, and begin to create additional reports or visualizations from a previously-configured data source.

To navigate to these settings and options from within an open Instaview, click **Configure** on the Configure mode switch . This brings you to Configure mode.

Some Instaview templates allow users to filter the data available to create reports with according to parameters. The Configure pane can display a number of different options that enable you to filter data depending on the template being used.
Note: All graphics displayed in this section show the Onyx theme.

- **Opening Existing Instaviews**
- **Saving an Instaview**
- **Closing an Instaview**
- **Deleting an Instaview**
- **Editing Instaview Data Sources**
- **Managing Visualizations in Instaview**

Opening Existing Instaviews

To open an existing Instaview, from the `--check--`Welcome screen , click **Open Existing**. A dialog box appears with a list of your saved Instaview data sources.

Saving an Instaview

To save an Instaview, from Configure mode , select the **Save** in the lower-right corner. When you save an Instaview you are saving the data integration transformation, metadata model, and the Analyzer report together. If you were in View mode . Instaview remembers the last state yous saved in, so the next time you open your saved file, you return to where you last left off.

Closing an Instaview

To close an Instaview, click **Close** in the upper-right corner. You are asked if you would like to save the current Instaview and are taken back to the `--check--`Welcome screen .

Deleting an Instaview

To delete an Instaview, from the **Open Existing** dialog box, select the Instaview to delete. The **Delete** button in the upper-right corner of the dialog box turns red, indicating you can delete the selected Instaview.

Editing Instaview Data Sources

To edit an existing Instaview data source, from Configure mode, within the **Configure** data source panel, click **Edit**. The data source input dialog appears. Or, if a template accepts parameters constraints there will be controls or fields that allow you to select the parameters on which to filter your data.

When configuring the input settings for a data source, the **Auto run Analysis when ready** option, if checked, will automatically create a new View after pressing **Run** or **Refresh**.

Further Reading

For more on Pentaho Data Integration transformations and jobs, see Create DI Solutions.

Managing Visualizations in Instaview

From the **Visualization** panel you can

- Select and view previously saved Views
- Delete visualizations created in Instaview
- Rename a visualization
- Create new Analyzer Reports and visualizations from the existing Instaview

To create a new Analyzer report from an exisiting Instaaview, click the **New Analysis** button, which brings you back to `--check--`View mode with a blank Analyzer canvas. You can open and edit existing Instaview visualizations by selecting a file from the list found in the **Visualization** panel.

Publish an Instaview Project to the BA Server

CAUTION:

This feature is experimental in Pentaho version 5.1 and is disabled by default.

After you have created and saved your Instaview project, you can publish it to a BA Server as a data source that you can share with your colleagues. Even if they do not have PDI installed, your colleagues will see the Instaview project as a data source that they can use in BA design tools such as Analyzer and Pentaho Interactive Reporting. You can also choose to publish one or more views, which are analyzer reports, along with your Instaview project. You can schedule an automatic reprocessing of your data so the data source and views are refreshed at regular intervals.

Enable the Publish Feature in Instaview on your System

The publish feature in Instaview is currently shipped as disabled. To enable this feature on your system, you will make several configuration changes.

Step One: Rename the plugin.xml_ File

1. Navigate to the `biserver-ee/pentaho-solutions/system/instaview-svc` file.
2. Rename the '`plugin.xml_`' file to '`plugin.xml`' by removing the trailing underscore in the file name.

Step Two: Enable the AgileBI Data Source

To enable the AgileBI data source, you must edit the `settings.xml` file.

1. Navigate to the `biserver-ee/pentaho-solutions/system/data-access` file.
2. Edit the `settings.xml` file. At the end of the Agile Mart Data Source section of the file, add the following line: `<enable-agile-mart-datasource>true</enable-agile-mart-datasource>`
3. Save your changes and restart the BA Server.

Step Three: Enable the Publish Feature in Instaview

To enable the publish feature in Instaview you must edit the `settings.xml`.

1. Navigate to `the data-integration/plugins/spoon/agile-bi/platform/pentaho-solutions/system/instaview/settings.xml` file.
2. Edit the `settings.xml` file. At the end of the file, add the following line: `<enable_gui_publish>true</enable_gui_publish>`
3. Save your changes and restart Instaview.

The publish feature for Instaview is now enabled on your system.

Set Up and Publish an Instaview Project to a BA Server

Configure and save your Instaview project, then click the **Publish** button in the **Instaview** window. Three panels appear: **BA Server**, **Analysis Report**, and **Data Refresh**.

Panel	Description
BA Server	Contains connection credentials
Analysis Report	Indicates whether you want to publish an Analyzer report, as well as report publishing details.
Data Refresh	Schedules the republishing of the Instaview project and Analyzer reports.

Step One: Connect to Server

Select the connection information for the BA Server you want to publish to from the Server Name text box in the BA Server panel, then click Save. If the name of the connection that you need does not appear, add one by doing these things.

1. Click the **+** button.
2. Enter the BA Server's **Name** and **URL**.
3. Enter the connection credentials by specifying the user name and password you need to connect to the BA Server. Make sure that the user you choose is assigned to a role that has **Read Content, Create Content, Schedule Content, Execute Transformations and Jobs, Manage Data Sources**, and **Publish Conten**t permissions assigned.
4. Click the **Test** button to make sure that the connection credentials are valid. Keep in mind that a test can fail if the connection credentials are valid, but the BA Server has stopped or if the BA Server's staging area has not been configured properly.
5. A message appears indicating whether the connection was made successfully. Note the message, click the **OK** button, then make any necessary adjustments.
6. Click the **Done** button.
7. The connection appears as highlighted in the **Server Name** list. Click the Save button to select the connection.
8. The **BA Server** panel collapses and the name of the connection you just selected appears.

A new Instaview project data source that has the name of Instaview project you just published appears in the **Manage Data Source** window in the **Pentaho User Console**. You can then use it as you would any other data source. If you also published analyzer views, they appear in a folder in the **Browse Files** page in the **Pentaho User Console**.

Step Two: Publish the Report

If you don't want to publish the Analyzer report along with the Instaview project, skip this step. If you do want to publish the Analyzer report, do these things.

1. Click the **Enable** button in the **Analysis Report** panel. A list of folders on the BA Server appears.
2. Indicate that you want to publish the Analyzer report by clicking the button next to the **Upload Analysis report when publishing** field so that it is **On**.

3. Select the location you want to publish to by clicking the folders until you find the one you want, then click **Save**, then go to the next step.
Note: If you have permission to publish or write to a folder, the **Save** button is enabled. If not, both the **Save** button and the **+** button next to the folder name are disabled.

4. If you want to create a new folder instead of choosing an existing one navigate to the location where you want to create the folder then click the "+" button to add a folder. Enter the name of the new folder in the **New Folder** window, then click the **OK** button. The new folder appears in the folder tree structure. Click **Save** to save the location.

Step Three: Schedule a Data Refresh

You can schedule a refresh for the data source created when publishing an Instaview project. This feature allows you to create a data source for business users and keep that data current when used in reports run on the BA server.

When scheduling a data refresh, you may want to consider your BA server environment and your users' needs. It is recommended that you schedule the refresh when less system resources are in use, such as on a Sunday at 2:00 AM. Also, you may want to consider when your users require the most current data set.

If you schedule a weekly refresh of the data, you can specify the days of the week to run the refresh, as well as a start and end dates.

1. In the **Data Refresh Schedule** panel, click **Edit** to expand a list of scheduling options in the panel.
2. In the **Repeat** drop-down menu, select how often you want to refresh the data.
   - **Never**: The data will not be scheduled to refresh. The PDI transformation will run once on the BA server, using the same data set as defined in Instaview.
   - **Weekly**: The data will be scheduled to refresh weekly and will appear in the list in the Schedules window of the User Console. When you select 'Weekly', more customization options appear.
3. If you selected 'Weekly', then in the **Run every week** on section, choose the days of the week for refreshing the data.
4. Choose a start date and start time using the date and time fields provided. You can click the calendar icon to open the date picker. These fields default to the current date and time.
5. In the **Repeat until** section, select the **No end date** option to schedule the data to refresh indefinitely, or select **End by** and enter a date in the field provided. You can click the calendar icon to open the date picker. The End by date field defaults to the current date.
6. Click **Save**. The Data Refresh Schedule panel collapses. The data refresh information now appears in the panel.

Edit the BA Server Connection
Note: If you edit the connection information, all Instaview projects that share the same connection will also use the edited connection information the next time they are published.

1. Open an existing Instaview project, then click **Publish** in the **Instaview** window.
2. In the **BA Server** panel, select the server connection information that you want to edit from the **Server Name** list.
3. Click the **Edit** button. (The **Edit** button looks like a pencil.) The **BA Server** panel expands to show the current connection information.
4. Change the information as needed. Note that if you edit the **name**, and other Instaview projects are also configured to use this connection, you must manually reset the connection in each of those projects.

5. Click the **Test** button to make sure that the connection credentials are correct. Keep in mind that a test can fail if the connection credentials are valid, but the BA Server is down or if you do not have permission to publish data sources to the BA Server. The test can also fail if the BA Server's staging database has not been configured.

6. A message appears indicating whether the connection was made successfully. Note the message, click the **OK** button, then make any necessary adjustments.

7. Click the **Done** button.

8. The connection appears as highlighted in the **Server Name** list. Click the **Save** button to select the server.

9. The **BA Server** panel collapses and the name of the server you just selected appears.

Updated server connection information is saved. The next time you publish the Instaview project, or any other Instaview project that uses a connection with the same name, the updated connection information is used.

Remove the BA Server Connection

Warning: Use care when you remove the connection information, as it might affect other Instaview projects.

1. Open an existing Instaview project, then click the **Publish** button in the **Instaview** window.

2. In the **BA Server** panel, select the server connection information that you want to remove from the **Server Name** list.

3. Click the **Remove** ("**X**") button.

4. The **Delete Server Connection** message appears. Click **Yes**. The server information is permanently deleted.

The server connection information is permanently deleted. The next time you publish the Instaview project, or any other Instaview project that uses the deleted connection, you will not be able to publish it until you have manually reset the connection.

Advanced User Topics

Instaview is a perspective within Pentaho Data Integration. Pentaho Data Integration contains perspectives for data integration, modeling, and visualization in one unified environment — the Spoon interface. This integrated environment enables you to build business intelligence solutions quickly and efficiently. Within Spoon you can change perspectives to switch from designing data transformations to modeling your data to visualizing your data.

You can also access these perspectives from the panels within Configure mode. Each of the panels takes you to a different perspective.

An advanced user is someone familiar with Pentaho Data Integration, OLAP cubes, or ETL in general.

If you are not getting the results you desire with your data and the provided templates you can modify them-- the ETL transformation, metadata model, and the Analyzer reports can all be independently adjusted using Pentaho Data Integration and the other perspectives.

If you don't have much experience with editing metadata models or build ETL transformations then you should contact an administrator for assistance with editing the Instaview templates.
Note: All graphics displayed in this section show the Onyx theme.

- **Advanced Analyzer Report Formatting Data in Instaview**
- **Editing Instaview Data Transformations**
- **Editing Instaview Metadata Models**

Advanced Analyzer Report Formatting Data in Instaview

Fields and Columns

Action	Description
To place a field on the report canvas...	Click and drag a field from the right pane to the report canvas. Alternatively, double-click a field name to place it onto the report canvas. Note: For quick placement, click Layout in the toolbar and drag the fields into the Columns area. Alternatively, right-click a field name and select, Column.
To place multiple fields on the report canvas...	Press the <CTRL> key and select multiple fields in the right pane, then drag the fields onto the report canvas. The fields will become columns in the report in the order in which they were selected.
To move columns left or right...	• Click the report header and move the column to the desired location. • Right-click on the column header and select Move > Right (or Left). Columns can also be moved as needed by clicking the Layout button in the toolbar and dragging the columns to the desired position.
To adjust column width...	Click the column header to select it. Move your cursor to the right or left until a small horizontal line appears. Drag the line to the desired width.
To assign column width (percentage)	Enter a value in the Column Width text box under the Formatting tab.
To change the column name...	Double-click the column name and type the new name in the available text box.
To remove a column...	Click and drag the column header to the right and place the column into the trash can.

Grouping

Action	Description
To add a group to a report...	Click and drag a group field from the right pane up above the column headers in the report. Release the mouse button when the green horizontal line appears. If the group field you want is a column in the report, drag the column name up above the column headers in the report. Release the mouse button when the green horizontal line appears. Note: For quick placement, click the Layout button and drag the fields into the Groups area. Alternatively, right click on the field name you want as your group and select, Group.
To add more than one group to a report...	Click another group field from the right pane and drag it above or below the previously placed group.
To change the sort order of a group...	• Click the small arrow to the right of the group name to change the sort order. • Assign the sort order under Group Sorting in the right pane

Filtering

Action	Description
To add a filter...	• Click Filters in the toolbar, then drag a field into the Filter area. • Right-click on the field name you want to filter on, (under the Data tab), and select, Filter. • Select column name, click to open the context menu and select Filter.
To edit a filter...	Click the Edit icon next to the filter name to open the Filter dialog box. Make your changes and click OK. Or you can select a column name, click to open the context menu and select, Filter.
To delete a filter...	Click Filters in the toolbar, then click the Delete icon next to the filter name.
To select a filter value from a list...	Click Select from list in the Filter dialog box.
To find a filter value in a list...	Type the first few characters of the value and click Find. Entries are case-sensitive.

Action	Description
To include or exclude a filter value from a list...	Click either the Includes or Excludes link next to Select from list. Alternatively, make a selection next to Currently in the Filter dialog box.
To specify a specific filter value...	Click Match a specific value, then select a constraint from the list.
To create an advanced query ...	Within the Filter Pane, click on the Advanced Filter button in the bottom right hand corner. Enter a MQL query.

Formatting

Action	Description
To undo or redo previous actions...	Within the toolbar, click the green left-pointing arrow to Undo or the green right-pointing arrow to Redo.
To change the font type in a column header...	Select the column header. Under the Formatting tab, select font type from the available list.
To change font type in the column details...	Select the column details. Under the Formatting tab, select font type from the available list.
To change font color in a column header...	Select column header. Under the Formatting tab, click the text color icon to select font color from the available list.
To change the font color in column details	Select column details. Under the Formatting tab, click (icon here) to select font color from the available list.
To change the column header background color...	Select the column header. Under the Formatting tab, click Background Color bucket icon. Select a color from the color picker or create your own custom color.
To change the column details background color...	Select column details. Under the Formatting tab, click Background Color bucket icon. Select a color from the color picker or create your own custom color.
To apply text justification...	Select the report element column header or column details. Under the Formatting tab, click the appropriate text alignment option. Column headers can be formatted separately from column details.

- **Set Chart Options**

Set Chart Options

You can modify the aesthetics of a chart in Instaview by clicking Chart Options in the Properties panel in View mode. These options enable you to define how to display a chart; change a chart's colors, add a legend, and more. You can also access the Chart Options dialog box by clicking More actions and options

File:/instaview_more_actions_and_options_button.png
on the `--check--`Analyzer toolbar and choose Chart Options.

General

Option	Description
Background	Fill type defines the background color of the chart and the specific fill colors used. A Gradient will result in a gradual color transition in the fill color. Choose the color you want from the available color pickers (Fill Color, End Color) You can choose not to have a fill color (None), or choose a single background color (Solid).
Labels	Allows you to choose a font type, size, formatting, and color of the labels in your chart.
Domain Limit	Allows you to adjust the number of values that are laid on the report.

Axis

Option	Description
Primary Axis: Auto Range	When selected, allows you to define the range shown on the primary axis.
Primary Axis: Scale	Allows you to choose the scale used on the primary axis.
Primary Axis: (Scatter and Column-Line Combo charts only) Auto Range	When selected, allows you to define the range shown on the secondary axis.
Secondary Axis: Scale	Allows you to choose the scale used on the secondary axis.

Legend

Option	Description
Show Legend	Allows you to enable to disable the legend display.
Position	Allows you to choose the placement (Top, Right, Bottom, Left) of the legend on the chart.
Background Color	Allows you to choose a background color for the legend.
Font	Allows you to set the font type, size, format, and color associated with your legend.

Other

Option	Description
Multi-Charts	Allows you to define the number of charts that display per row, when using the Multi-Charts feature, and the axis range for the charts.
Size By Measure	Define how to treat negative values
Empty Cell Treatment (Line and Area charts only)	Choose how to define the way points with no value appear.

Editing Instaview Data Transformations

You can edit the data integration transformation for an Instaview by clicking **Edit** within the **Data Integration** panel.

Changing how your data is transformed should be done by a data designer. Configuring a transformation incorrectly would limit your ability to create Analyzer Reports. If you do not have experience with ETL (Extract, Transform, Load), you should use caution when directly editing the data integration transformation. Pentaho Data Integration is a powerful ETL tool and can be approached by even a novice data designer with the help of some additional resources.

Once selected, editing the data integration transformation is done within the Pentaho Data Integration Spoon interface from the **Data Integration** perspective.

Using Pentaho Data Integration perspectives allows you to change how you connect to data, the connection data type to connect to or how that data is transformed. The **Data Integration** perspective is a powerful ETL tool with drag-and-drop capabilities which enable users to manage their data.

Further Reading

For more on Pentaho Data Integration, see these sections:

- Get Started with DI
- Create DI Solutions

Editing Instaview Metadata Models

You can edit the metadata model for an Instaview by clicking **Edit** within the **Model** panel. Clicking **Edit** brings you to the **Model** perspective within Pentaho Data Integration.

The **Model** perspective is used for designing reporting and OLAP metadata models that can be tested from within the **Visualize** perspective or published to the Pentaho BA Server.