Class Handout



WorldShare[®] Analytics Create Multiple Universe Reports in WorldShare Report Designer

Case Study Notes

This document, which accompanies the recorded training session of the same name, is intended to help you create multiple universe reports in WorldShare Report Designer by providing step-by-step instructions for replicating the case studies in the session.

Things to know before creating multiple universe reports

- Data in the OCLC data warehouse is stored in universes. Think of universes like folders or directories. Universes contain objects (dimensions and measures). Available universes include:
 - Acquisitions
 - Cataloging
 - Circulation Events
 - Circulation Fiscal Transactions
 - Circulation Hold Request
 - Circulation Item Status
 - Circulation Patron Information
 - Data Refresh Activity
 - E-Resources
 - Overlap
- In order to generate reports using data from multiple universes, there must be a common data point in each universe.
- OCLC number has different data types in different universes. It's a text string in the Acquisitions and Overlap > Title universes, and a number in other universes. Therefore OCLC number cannot be used as a match point between Acquisitions and Cataloging, for example. This issue will be resolved in a future release.
- In the cataloging universe only:
 - Data is only available from July 2015 forward.
 - A report can include dimensions/measures from *either* Holding Information or Volatility Information, but not both.



Case study 1

Scenario

You want a list of new titles received in Acquisitions with a count of the number of times they have been checked out.

Steps

- 1. Login with a user name that has the Report Author role.
- 2. On the Analytics tab, click Reports > Report Launch Pad.
- 3. From the **Applications** menu, select **Web Intelligence**.



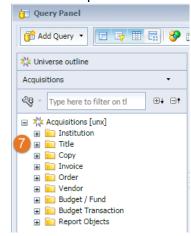
4. Click the New button.



- 5. In the Create a document dialog: Click **Universe: Select a universe as a data source**. Click **OK**.
- 6. In the Universe dialog: Select Acquisitions.unx. Click OK.

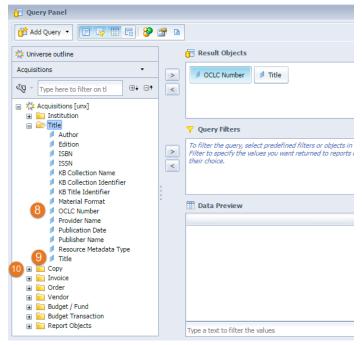
In Query Panel, select dimensions to add to Result Objects:

7. Click + to expand Title folder

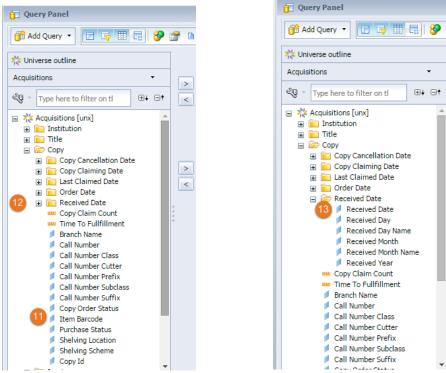




- 8. Double-click OCLC Number,
- 9. Double-click Title.



- 10. Click + to expand Copy folder.
- 11. Double-click Item Barcode.

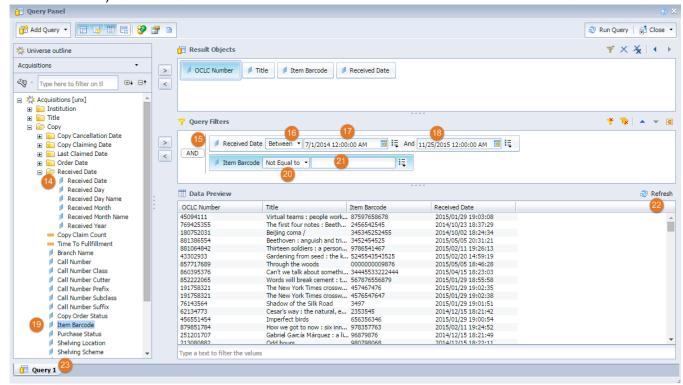


- 12. Click + to expand Received Date folder.
- 13. Double-click Received Date.



In Query Panel, select dimensions for Query Filters:

- 14. Drag received date from left panel
- 15. to Query Filters.
- 16. In Query Filters Panel, for Received Date, select Between.
- 17. For first date, enter 7/1/2014.
- 18. For second date, enter today's date.
- 19. Drag item barcode from left panel to Query Filters.
- 20. For Item Barcode, select Not Equal to.
- 21. In **Type a constant** box, press the spacebar (if item doesn't have a barcode, we don't want it in our report).
- 22. In Data preview, click **Refresh**. Verify that desired data (OCLC Number, Title, Item Barcode, Received Date) is included.



Rename the query:

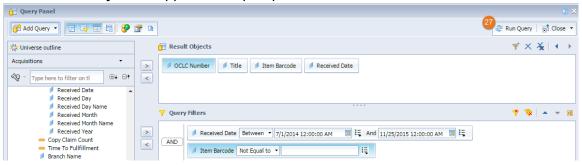
- 23. Right-click **Query 1** tab at bottom of Query Panel.
- 24. Click Rename,
- 25. In New value, type Acq.
- 26. Click **OK**.





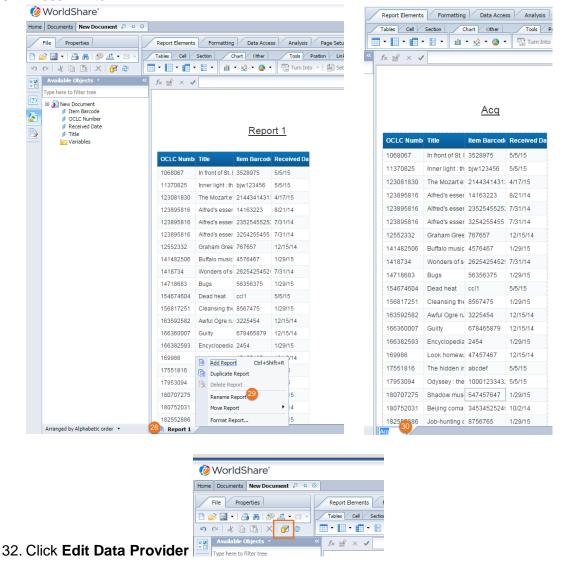


27. Click Run Query. Data appears in report panel.



Rename the Report:

- 28. Right-click **Report 1** tab at bottom of report panel.
- 29. Click Rename Report.
- 30. Type Acq.
- 31. Press <Enter>.





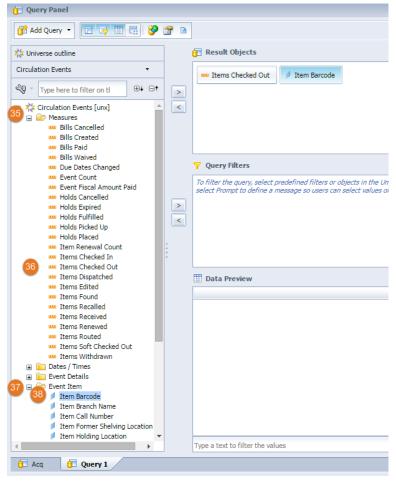
33. In Query Panel, Click Add Query > From the universe.



34. In Add Query dialog, select Circulation Events.unx. Click OK.

In Query Panel, select dimensions and measures to add to Result Objects:

- 35. Click + to expand Measures folder.
- 36. Double-click Items Checked Out.
- 37. Click + to expand Event Item,
- 38. Double-click Item Barcode.

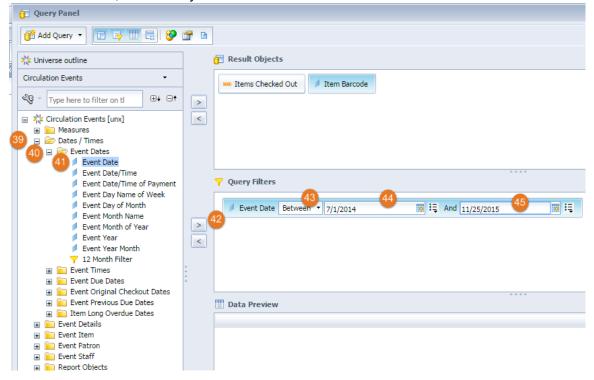




In Query Panel, select dimensions and measures for Query Filters:

Set Event Dates filter:

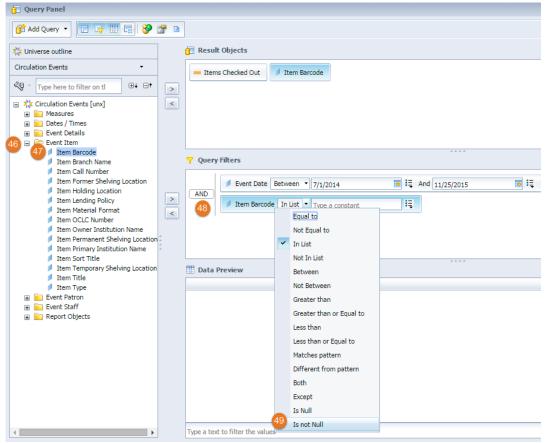
- 39. Click + to expand Dates / Times folder.
- 40. Click + to expand Event Dates.
- 41. Drag Event Date
- 42. to Query Filters.
- 43. In Event Date, select Between.
- 44. For first date, enter 7/1/2014.
- 45. For second date, enter today's date.





Set Item Barcode filter:

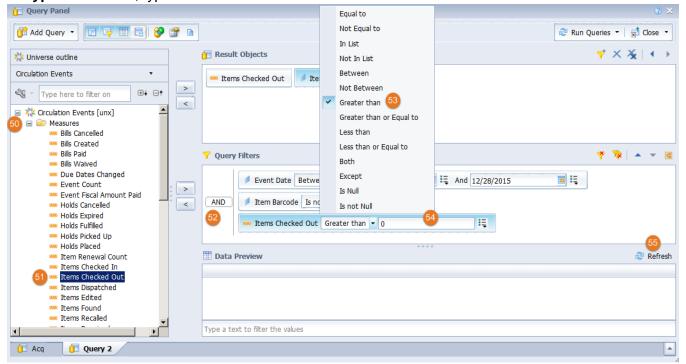
- 46. Click + to expand Event Item folder,
- 47. Drag Item Barcode
- 48. to Query Filters.
- 49. For Item Barcode, select is not Null.





Set Items Checked Out Filter:

- 50. Click + to expand Measures folder,
- 51. Drag Items Checked Out
- 52. to Query Filters.
- 53. For Items Checked Out, select Greater than.
- 54. In **Type a constant**, type **0**.

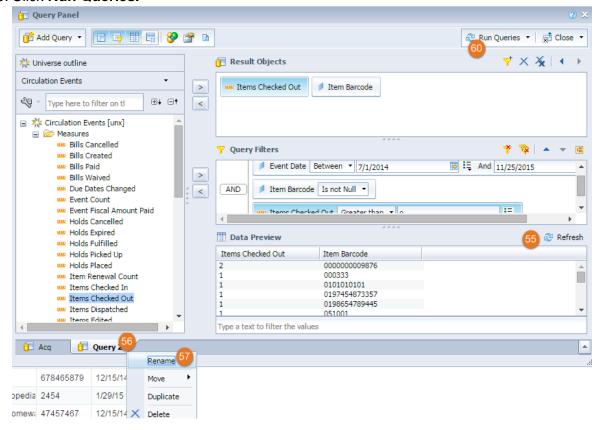


55. In Data preview, click **Refresh**. Verify that desired data elements (Items Checked Out, Item Barcode) are included, and Items Checked Out for each row is greater than or equal to 1.



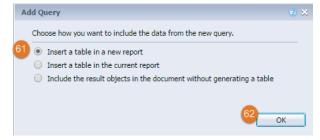
Rename the query:

- 56. Right-click Query 2 tab at bottom of Query Panel.
- 57. Click Rename,
- 58. In New value, type Circ.
- 59. Click **OK**.
- 60. Click Run Queries.



In the Add Query dialog, choose how you want to include the data from the new query.

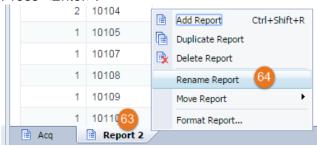
- 61. Select Insert a table in a new report.
- 62. Click OK.

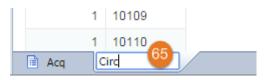




Rename the report:

- 63. Right-click Report 2 tab at bottom of report panel.
- 64. Click Rename Report,
- 65. Type **Circ**.
- 66. Press <Enter>.

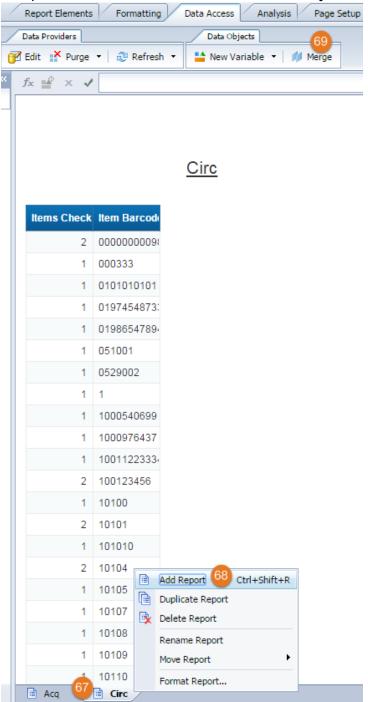






Merge reports:

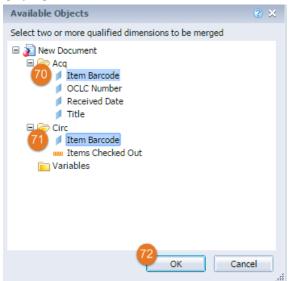
- 67. Right-click on either of the two report tabs (Acq or Circ).
- 68. Click Add Report.
- 69. At top of window, select **Data Access > Data Objects > Merge**.





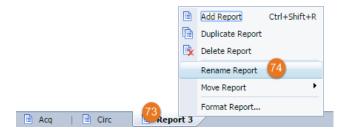
In Available Objects dialog:

- 70. Single-click **Acq** > **Item Barcode**.
- 71. Control-click to select **Circ** > **Item Barcode**.
- 72. Click **OK**.



Rename the report:

- 73. Right-click **Report 3** tab at bottom of report panel.
- 74. Click Rename Report.
- 75. Type New Items Circ Count.
- 76. Press <Enter>.

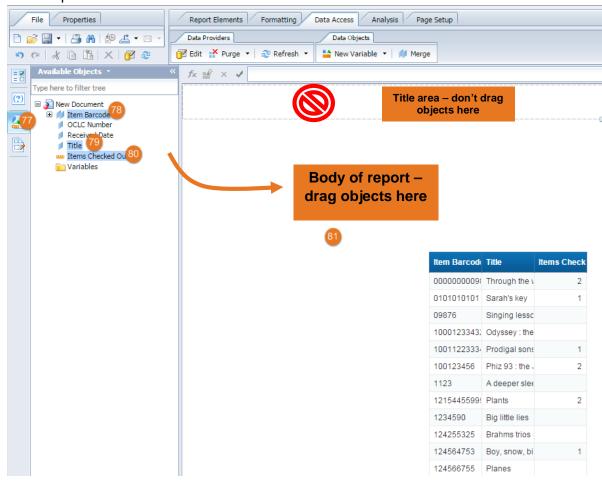






Select the dimensions and measures for the New Items Circ Count report:

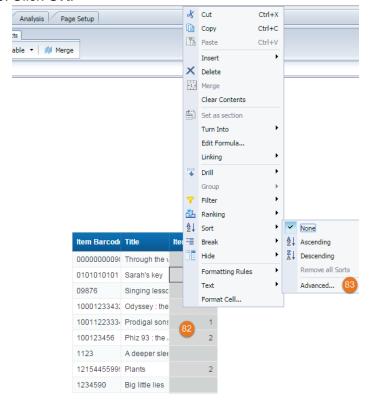
- 77. If necessary, click Available Objects.
- 78. Click **Item Barcode** (click the "parent" Item Barcode, not the individual Item Barcode (Acq) and Item Barcode (Circ)).
- 79. Shift-click Title.
- 80. Shift-click Items Checked Out.
- 81. All of these dimensions and measures selected in the previous step should now be highlighted. Drag them all from Available Objects to the report panel on the right. Rather than dragging them to the title area (indicated by a dotted-outline box at the top), be careful to drag them to the body of the report.

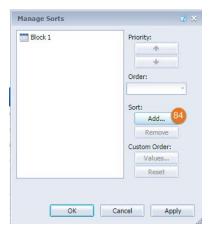


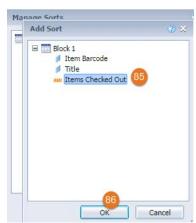


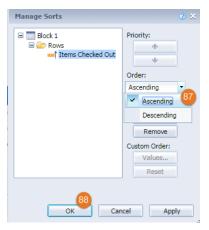
Sort by the Items Checked Out column, so that items checked out 1 or more times are at the top of the report:

- 82. Right-click in a data cell of Items Checked Out.
- 83. Click **Sort** > **Advanced**.
- 84. In Manage Sorts dialog, click Add.
- 85. In Add Sort dialog, select Items Checked Out.
- 86. Click **OK**.
- 87. In Manage Sorts dialog, select **Order** > **Ascending**.
- 88. Click **OK**.





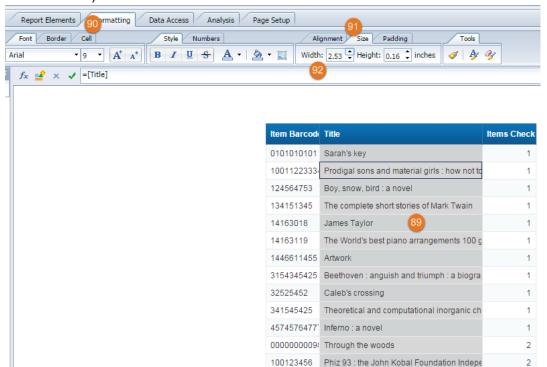




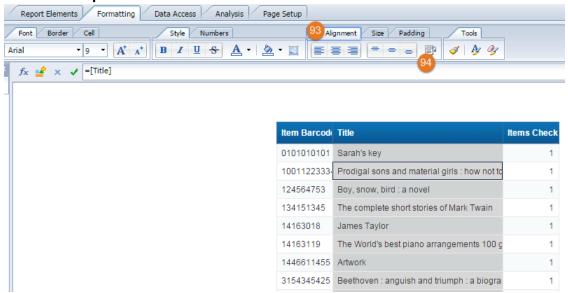


Resize columns and wrap text as needed:

- 89. Click in a data cell of the **Title** column.
- 90. Click Formatting.
- 91. Click Size.
- 92. Type or select a number for **Width**. (Alternatively, you can drag the column divider to the desired width).



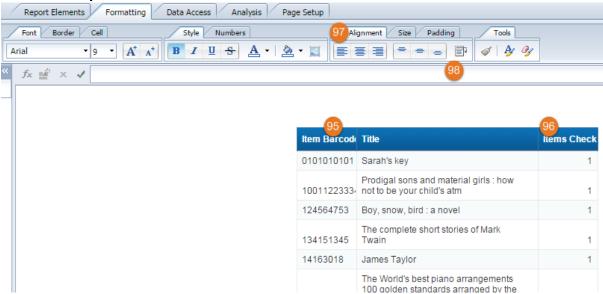
- 93. With the data cells in the **Title** column selected, click **Formatting > Alignment**.
- 94. Click the Wrap Text button.





Wrap text in the column headers:

- 95. Click in the Item Barcode header cell.
- 96. Shift-click in the Items Checked Out header cell.
- 97. Click **Formatting > Alignment**.
- 98. Click the Wrap Text button.



99. Save, export, or print the report as needed.



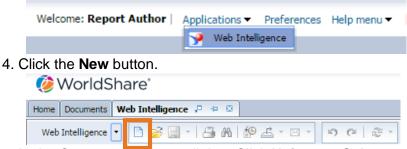
Case study 2

Scenario

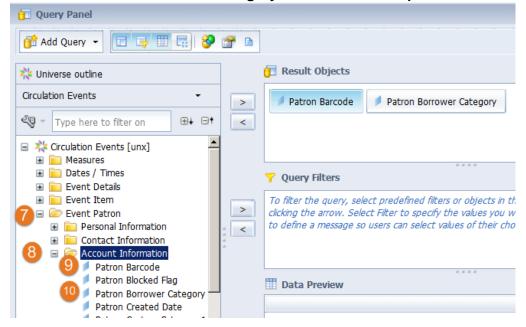
For each patron borrower category, you want to know the percentage of patrons in that category who have checked out at least one item during a specified time period (active patrons), and the average number of items checked out per active patron.

Steps

- 1. Login with a user name that has the Report Author role.
- 2. On the Analytics tab, click Reports > Report Launch Pad.
- 3. From the **Applications** menu, select **Web Intelligence**.

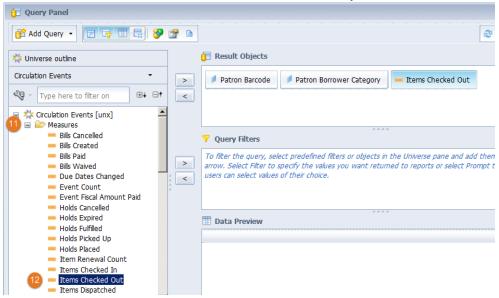


- 5. In the Create a document dialog: Click **Universe: Select a universe as a data source**. Click **OK.**
- 6. In the Universe dialog: Select Circulation Events.unx. Click OK.
- In Query Panel, select dimensions to add to Result Objects:
- 7. Click + to expand Event Patron.
- 8. Click + to expand Account Information.
- 9. Double-click Patron Barcode to add to Result Objects.
- 10. Double-click Patron Borrower Category to add to Result Objects.





- 11. Click + to expand Measures.
- 12. Double-click **Items Checked Out** to add to Result Objects.

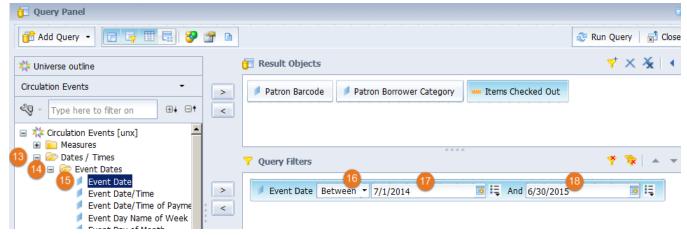


In Query Panel, select Query Filters:

13. Click + to expand Dates / Times.

Set Query Filter for Event Date:

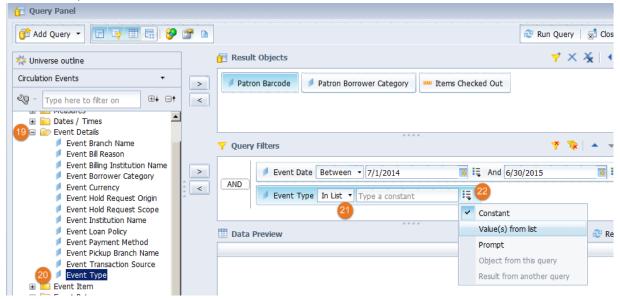
- 14. Click + to expand Event Dates.
- 15. Drag **Event Date** to Query Filters.
- 16. In Query Filters Panel, for Event Date, select **Between**,
- 17. For first date, enter 7/1/2014.
- 18. For second date, enter **6/30/2015**.



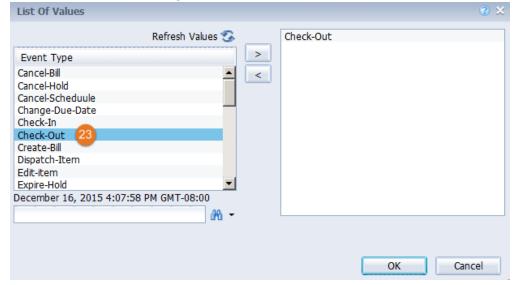


Set Query Filter for Event Type:

- 19. Click + to expand Event Details.
- 20. Drag Event Type to Query Filters,
- 21. In Query Filters Panel, for Event Type, select In List.
- 22. Click ; then select Values from List.

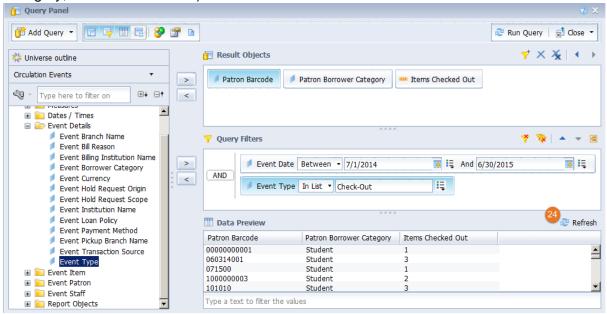


23. In the List of Values dialog, double-click Check Out; then click OK.



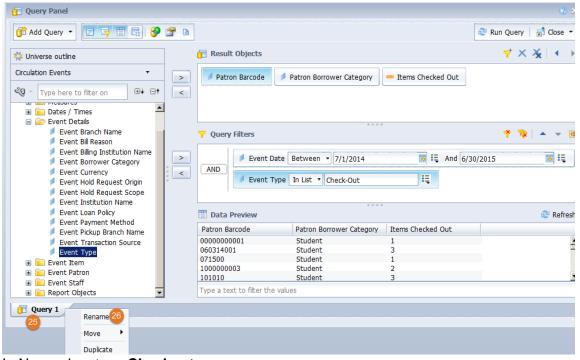


24. In Data preview, click **Refresh**. Verify that desired data (Patron Barcode, Patron Borrower Category, Items Checked Out) is included.



Rename the query:

- 25. Right-click Query 1 tab at bottom of Query Panel.
- 26. Click Rename.



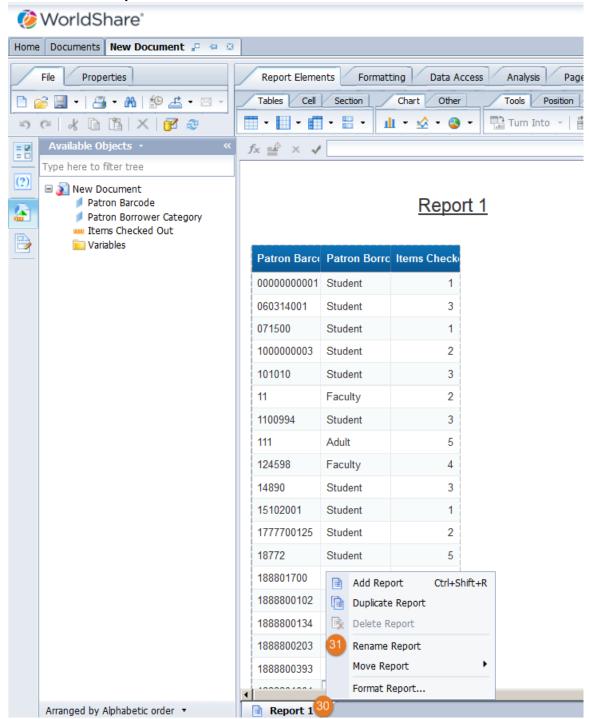
- 27. In New value, type Checkouts.
- 28. Click **OK**.



29. Click Run Query. Data appears in report panel.

Rename the Report:

- 30. Right-click **Report 1** tab at bottom of report panel.
- 31. Click Rename Report.

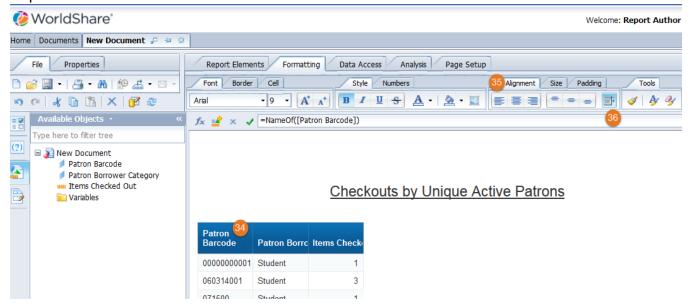


- 32. Type Checkouts by Unique Active Patrons.
- 33. Press <Enter>.



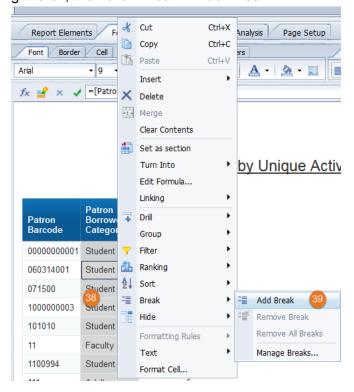
Format column headers:

- 34. Click header cell of first column (Patron Barcode),
- 35. Click Formatting > Alignment;
- 36. Then click the Wrap text button
- 37. Repeat for each column header.



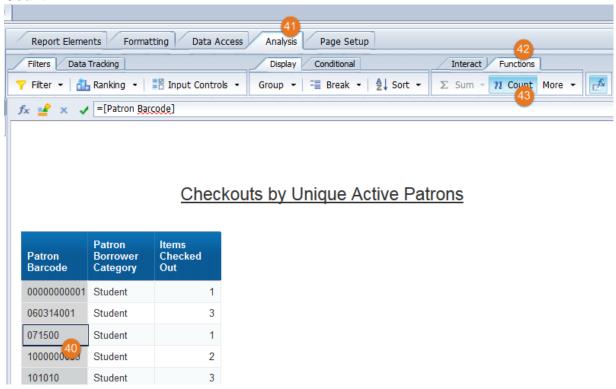
Insert breaks and subtotals:

- 38. Click in a data cell of the Patron Borrower Category column.
- 39. Right-click, then click Break > Add Break.

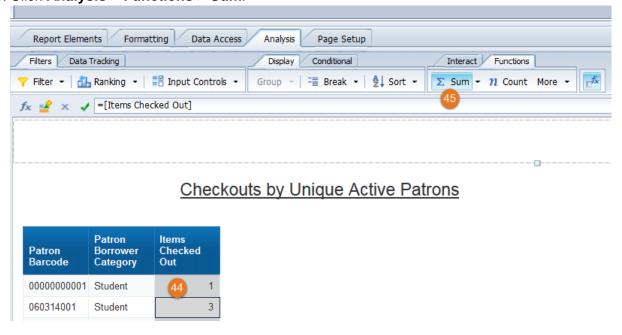




- 40. Click in a data cell of the Patron Barcode column.
- 41. Click Analysis >
- 42. Functions >
- 43. Count.



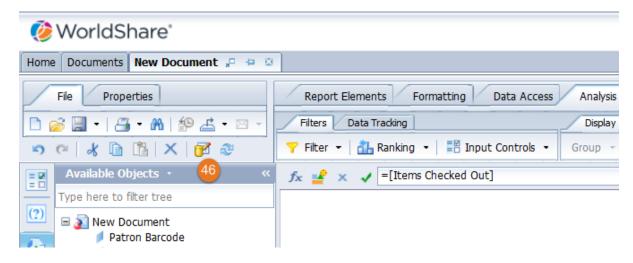
- 44. Click in a data cell of the Items Checked Out column.
- 45. Click Analysis > Functions > Sum.











47. In Query Panel, Click **Add Query** > **From the universe**.

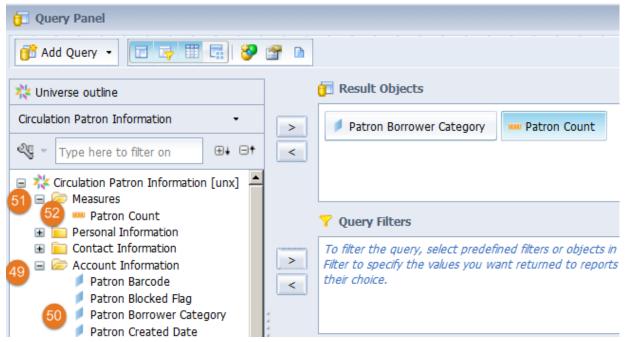


48. In Add Query dialog, select Circulation Patron Information.unx. Click OK.

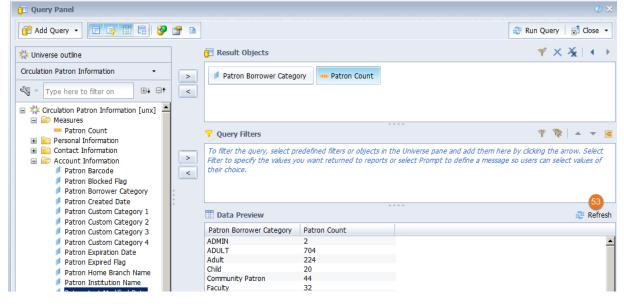


In Query Panel, select dimensions and measures to add to Result Objects:

- 49. Click + to expand Account Information folder.
- 50. Double-click Patron Borrower Category.
- 51. Click + to expand Measures folder.
- 52. Double-click Patron Count.



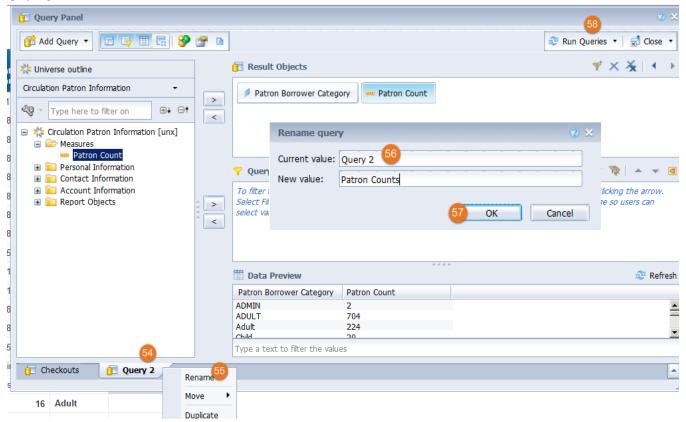
53. In Data Preview, panel click **Refresh**. Verify that desired data (Patron Borrower Category, Patron Count) is included.





Rename the query:

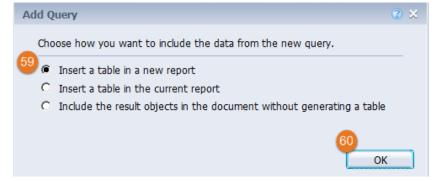
- 54. Right-click Query 2 tab at bottom of Query Panel.
- 55. Click Rename.
- 56. In New value, type Patron Counts.
- 57. Click OK.



58. Click Run Queries.

In the Add Query dialog, choose how you want to include the data from the new query:

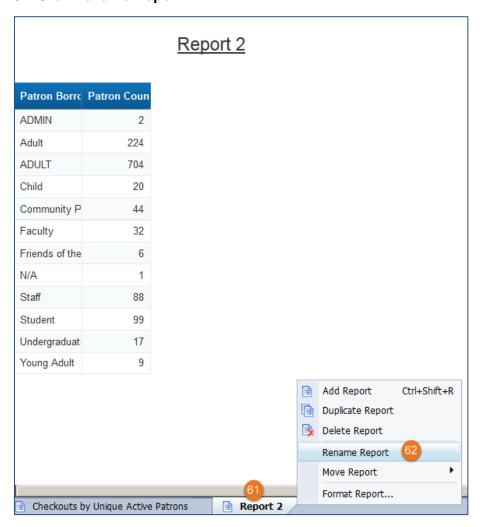
- 59. Select Insert a table in a new report.
- 60. Click **OK**.





Rename the report:

- 61. Right-click Report 2 tab at bottom of report panel.
- 62. Click Rename Report.



- 63. Type Patron Counts.
- 64. Press <Enter>.





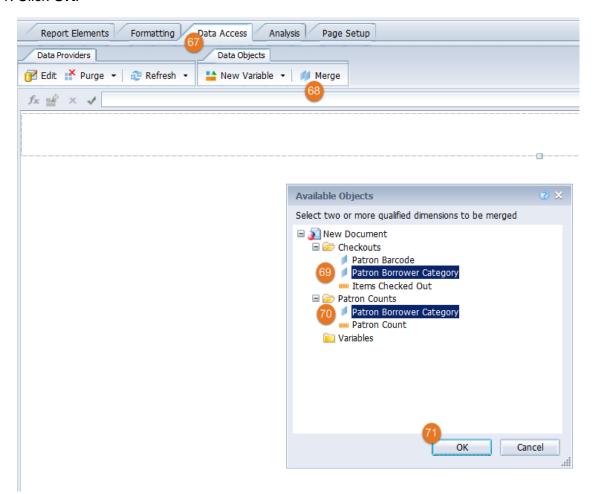
Merge reports:

- 65. Right-click on either of the two report tabs (Checkouts by Unique Active Patrons or Patron Counts).
- 66. Click Add Report.





- 67. At top of window, select Data Access > Data Objects >
- 68. Merge.
- In Available Objects dialog:
- 69. Single-click Checkouts > Patron Borrower Category.
- 70. Control-click to select **Patron Counts** > **Patron Borrower Category**.
- 71. Click **OK**.



Rename the report:

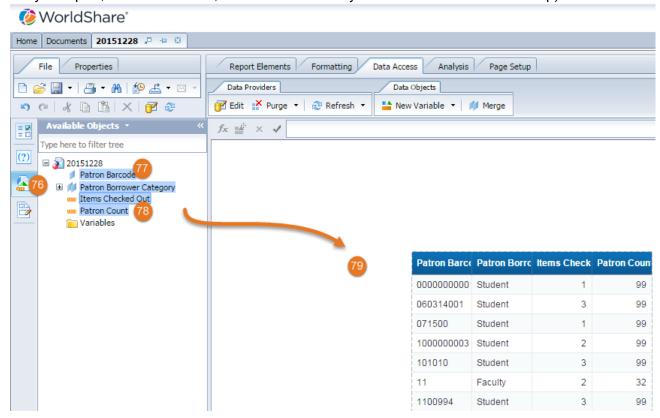
- 72. Right-click **Report 3** tab at bottom of report panel.
- 73. Click Rename Report.
- 74. Type Active Patron Summary.
- 75. Press <Enter>.





Select dimensions and measures to include in the report:

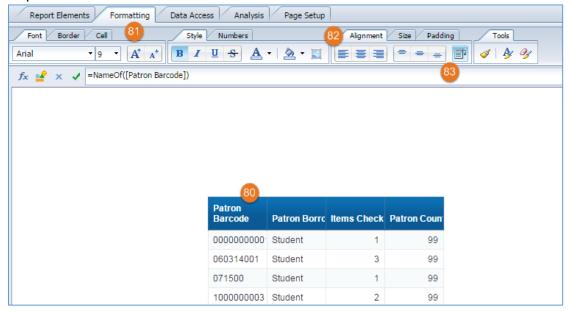
- 76. If the Available Objects panel is not open, click the Available Objects button.
- 77. Click Patron Barcode.
- 78. Shift-click Patron Count.
- 79. All of these dimensions and measures selected in the previous step (Patron Barcode, Patron Borrower Category, Items Checked Out, Patron Count) should now be highlighted. Drag them as a group from Available Objects to the report panel on the right (be careful to drag them to the body of report, not the title area, which is indicated by a dotted-outline box at the top).





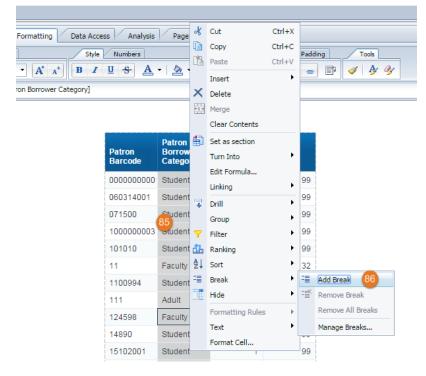
Format the column headers:

- 80. Click the Patron barcode column header.
- 81. Click Formatting >
- 82. Alignment.
- 83. Then click the Wrap Text button.
- 84. Repeat for each column header.



Add breaks:

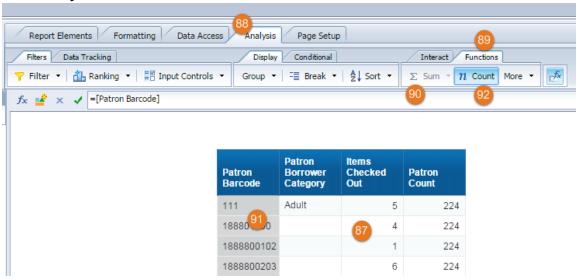
- 85. Right-click in a data cell of the Patron Borrower Category column.
- 86. Click Break > Add Break.





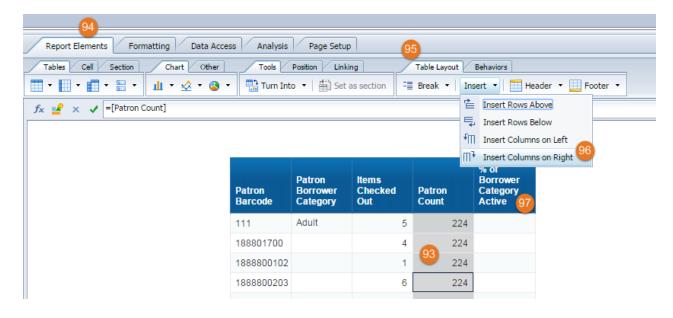
Insert formulas:

- 87. Click in a data cell of the Items Checked Out column.
- 88. Click Analysis >
- 89. Functions >
- 90. Sum.
- 91. Click in a data cell of the Patron Barcode column.
- 92. Click Analysis > Functions > Count.



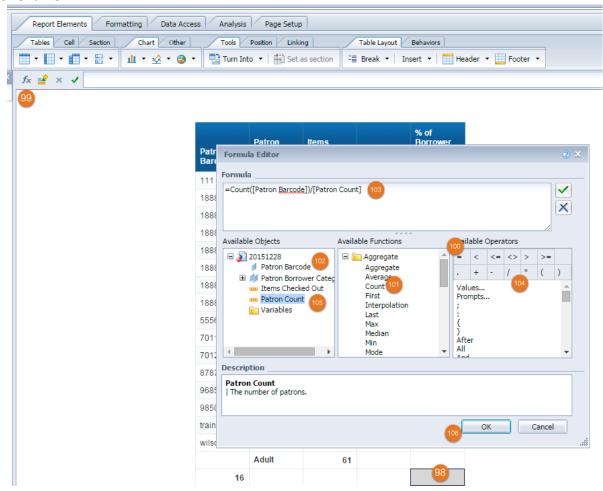
Add a column for % of borrower category active and add formula:

- 93. Click in a data cell of the Patron Count column.
- 94. Click Report Elements >
- 95. Table Layout >
- 96. Insert > Insert Columns on Right.
- 97. Double-click in header of new column; then type **% of Borrower Category Active**; press <Enter>.

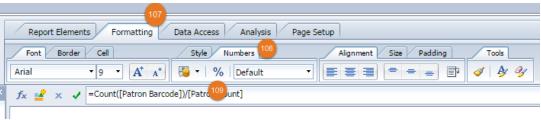




- 98. Click in last row of new column.
- 99. Click **Edit the Formula** button
- 100. From Available Operators, click =.
- 101. From **Available Functions**, double-click **Count**.
- 102. From Available Objects, double-click Patron Barcode.
- 103. In Formula box, position cursor at end.
- 104. From Available Operators, click /.
- 105. From Available Objects, double-click Patron Count.
- 106. Click **OK**.



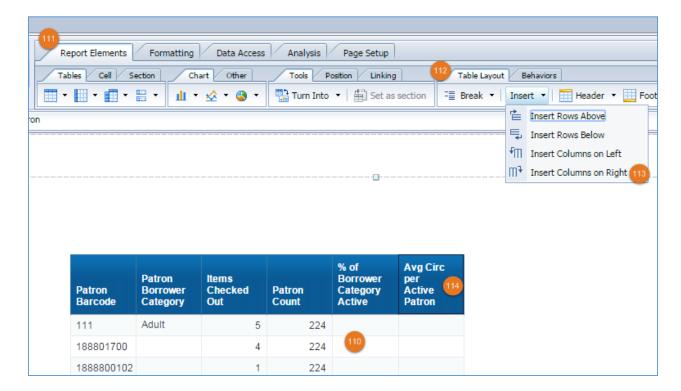
- 107. Click Formatting >
- 108. **Numbers** >
- 109. %.





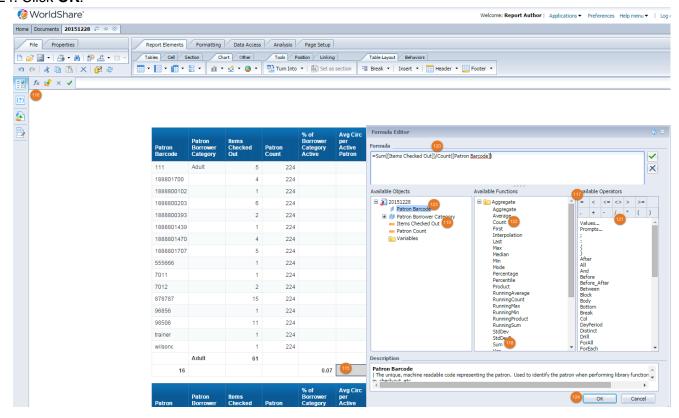
Add a column for Avg Circ per Active Patron and add formula:

- 110. Click in a data cell of the % of Borrower Category Active column.
- 111. Click Report Elements >
- 112. Table Layout >
- 113. Insert > Insert Columns on Right.
- 114. Double-click in header of new column; then type Avg Circ per Active Patron; press <Enter>.





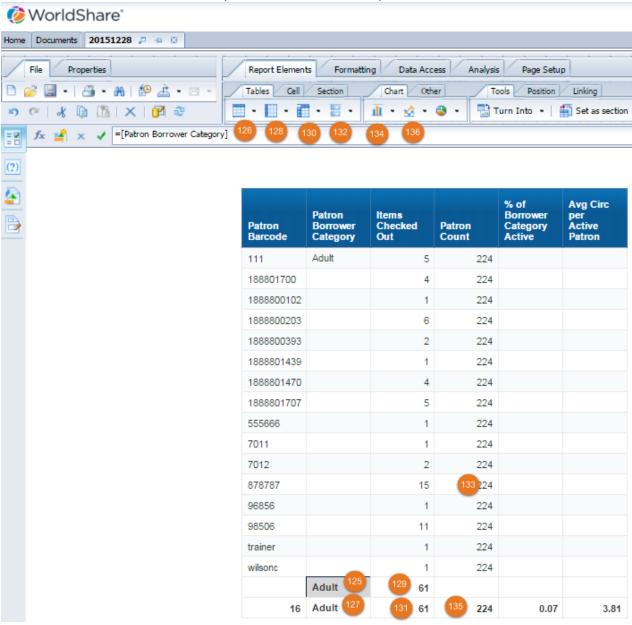
- 115. Click in last row of new column.
- 116. Click **Edit the Formula** button
- 117. From Available Operators, click =.
- 118. From Available Functions, double-click Sum.
- 119. From Available Objects, double-click Items Checked Out.
- 120. In Formula box, position cursor at end.
- 121. From Available Operators, click /
- 122. From Available Functions, double-click Count.
- 123. From Available Objects, double-click Patron Barcode.
- 124. Click OK.





Move all subtotals to the same row:

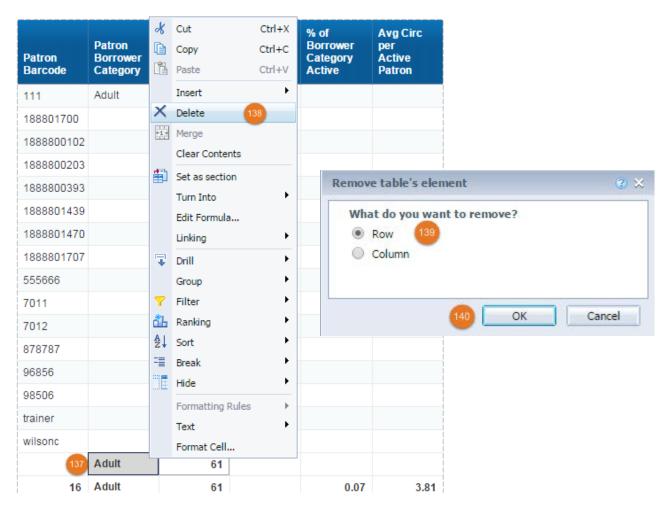
- 125. Click the subtotal cell for Patron Borrower Category.
- 126. In the Formula Bar, highlight the entire formula, and <Ctrl> <C> to copy the formula.
- 127. Click the cell immediately below.
- 128. In the formula bar, <Ctrl> <V> to paste the formula; then press <Enter>.
- 129. Click the subtotal cell for Items Checked Out
- 130. In the Formula Bar, highlight the entire formula, and <Ctrl> <C> to copy the formula.
- 131. Click the cell immediately below.
- 132. In the formula bar, <Ctrl> <V> to paste the formula; then press <Enter>.
- 133. Click in a data cell of the Patron Count column.
- 134. In the Formula Bar, highlight the entire formula, and <Ctrl> <C> to copy the formula.
- 135. Click the cell in the subtotal row.
- 136. In the formula bar, <Ctrl> <V> to paste the formula; then press <Enter>.





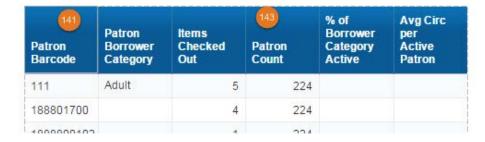
Delete the row that is now redundant:

- 137. Right-click anywhere in the row.
- 138. Select Delete.
- 139. Click **Row**.
- 140. Click **OK**.



Rename column headings:

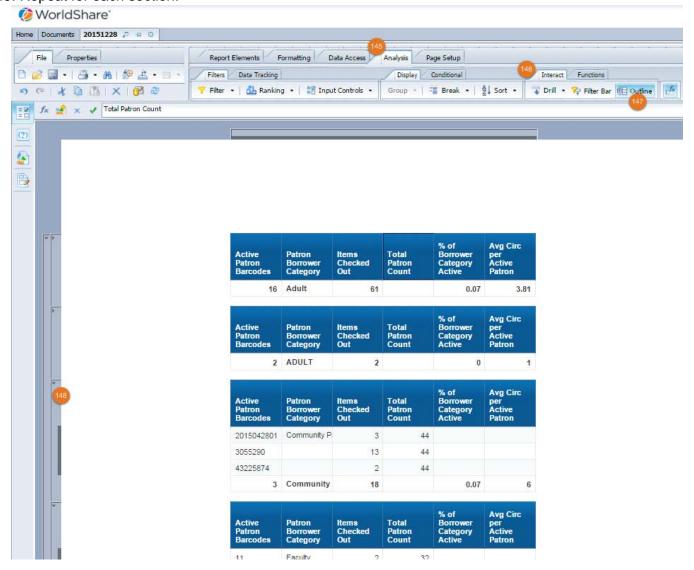
- 141. Double-click the Patron Barcode header cell.
- 142. Type **Active Patron Barcodes** and press <Enter>.
- 143. Double-click the Patron Count header cell.
- 144. Type **Total Patron Count** and press <Enter>.





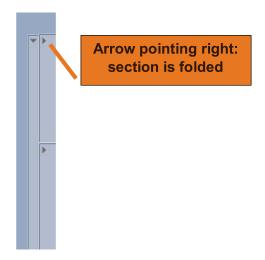
Fold each section to hide the data and display only summary (subtotal) information:

- 145. Click Analysis >
- 146. **Interact** >
- 147. **Outline**.
- 148. In the outline tree, click the innermost arrow.
- 149. Repeat for each section.





Here's a closer look at folding. Fold a section so that only summary information (subtotals) display. If needed, you can unfold a section to again display the detail data that make up that section's summary (subtotal).



Active	Patron	Items
Patron	Borrower	Checked
Barcodes	Category	Out
16	Adult	61
Active	Patron	Items
Patron	Borrower	Checked
Barcodes	Category	Out





Save the report:

- 150. From the Save menu
- 151. Click Save As.
- 152. In the Save As dialog, click Public Folders.
- 153. Double-click on the folder with your library's OCLC symbol.
- 154. Type a file name: Active Patron Summary.
- 155. Click Save.

