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
to Query Filters.

15. In Query Filters Panel, for Received Date, select **Between**.

16. For first date, enter *7/1/2014*.

17. For second date, enter today’s date.

18. Drag item barcode from left panel to Query Filters.

19. For Item Barcode, select **Not Equal to**.

20. In **Type a constant** box, press the spacebar (if item doesn't have a barcode, we don’t want it in our report).

21. 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.

![Report Panel with Data]

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

![Report Panel with Acq]

32. Click **Edit Data Provider**.
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
to Query Filters.
42. In Event Date, select Between.
43. For first date, enter 7/1/2014.
44. 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**.

![Available Objects dialog](image1)

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>.

![Rename Report](image2)
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.
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 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.

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.**
46. Click **Edit Data Provider**.

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 > 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 > Alignment**.
82. Then click the **Wrap Text** button.
83. 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** > **Functions** > **Sum**.
89. Click in a data cell of the **Patron Barcode** column.
90. Click **Analysis** > **Functions** > **Count**.

Add a column for % of borrower category active and add formula:
91. Click in a data cell of the **Patron Count** column.
92. Click **Report Elements** > **Table Layout** > **Insert** > **Insert Columns on Right**.
93. 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).
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**.