Advanced Analytics

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Session Objectives

- Session Description: Starting with scenarios describing what is required, we'll build a number of complex analyses that focus on advanced reporting capabilities

- Objective(s): By the end of this session you will be able to:
  - Create complex analyses
  - Build confidence in using advanced functions in Alma Analytics

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Agenda

1 Introduction

2 Using Regular Expressions to Separate Multiple Appearances of Repeated Data

3 Adding Action Links to an Analysis

4 Fines and Fees Aging

5 Next Steps, Support Resources and Feedback

Using Regular Expressions to Separate Multiple Appearances of Repeated Data

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Introduction

- In Analytics, a "one to many" relationship sometimes displays for one entity when the "many" values appear are found in a field that is delimited with a semicolon

- Some examples:
  - One Bibliographic record may have multiple ISBN entries
  - One Bibliographic record may have multiple 035 entries
  - One Course Reserves container may have multiple instructors

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Introduction

- If desired, it is possible to have "semicolon-separated" values appear as separate columns in the results of an analysis

- Doing so can be useful for display and filtering purposes

- There are multiple ways in which this can be accomplished

- We will use the "regular expression," perhaps the simplest method, to identify Bibliographic records with multiple ISBNs

We Begin With This Analysis and...

…These Results

MMS Id	Title	ISBN
991000200000541	Aura /	0374107017; 0374511713; 9780374107017; 9780374511715
991000220000541	Freedom of the individual /	0691072086; 0691019843; 9780691072081; 9780691019840
991000340000541	Virginia Woolf; a biography.	0151937656; 0156935805; 9780151937653; 9780156935807
991000400000541	Byron of the Wager /	0698106695; 9780698106697
991000530000541	A dictionary of Protestant church music /	0810807882; 9780810807884
991000540000541	John Steinbeck,	0805706933; 9780805706932
991000650000541	The juniper tree, and other tales from Grimm.	0374180571; 9780374180577
991000660000541	Basque nationalism /	0874170427; 9780874170429
991000670000541	The provincial towns of Georgian England : a study of the building process, 1740-1820 /	0773502009; 9780773502000
991000680000541	Bioenergetics /	0698106164; 9780698106161
991000690000541	Manners and murders in the world of Louis-Napoleon /	0295954310; 9780295954318
991000700000541	Anthropology : perspective on humanity /	0471838691; 9780471838692
991000710000541	Money, whence it came, where it went /	0395198437; 9780395198438
991000720000541	The Dilemmas of euthanasia /	0385097301; 9780385097307
991000730000541	Uncontrollable spending for social services grants /	0815718136; 9780815718130
991000740000541	The evolution of economic thought /	0155250027; 9780155250024
991000750000541	Masterworks of the British cinema /	0064300609; 0064386147.; 9780064300605

Regular Expression Syntax

Evaluate('regexp_substr(%1,''[^\;]+'', 1,n)',REPLACE "Column". "Name",';','\;'))

Occurrence of value

Name of column as it appears in "edit formula"

- The "n" is the column number (occurrence of the value between the semicolons)
- The "Column". "Name" is how the column appears by default when editing the formula
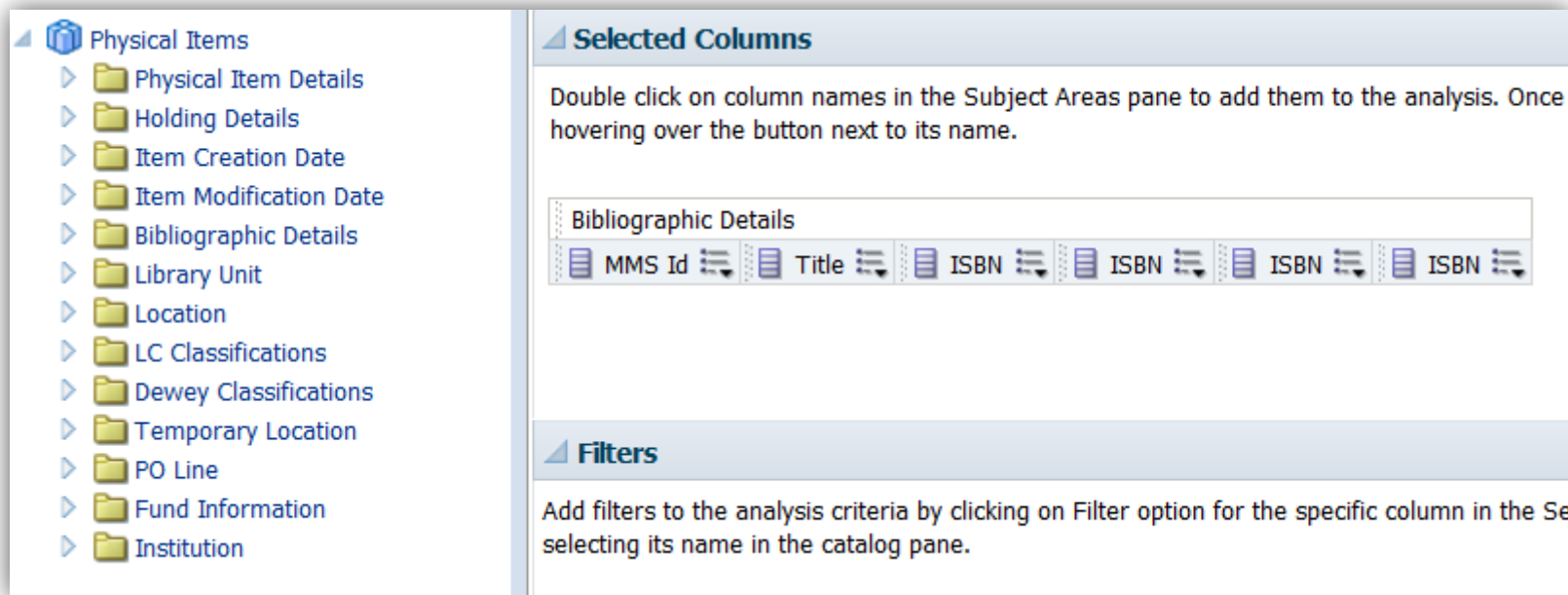
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Regular Expression – ISBN

- To establish the display of the first ISBN, the regular expression will be:

These are two single quotes rather than one double quote

Evaluate('regexp_substr(%1,"[^\;]+", 1,1)',REPLACE("Bibliographic Details"."ISBN",';','\;'))

Building the Analysis

- On the criteria tab, add the ISBN column for as many times as you want to display a separate column

Building the Analysis

- For each column, go to "edit formula"

Building the Analysis

Edit Column Formula

Column Formula | Bins

Folder Heading — Bibliographic Details
Column Heading — ISBN
☐ Custom Headings
☐ Contains HTML Markup
Aggregation Rule (Totals Row) — Default (None)

Available
Subject Areas

Column Formula
"Bibliographic Details"."ISBN"

Edit Column Formula

Column Formula | Bins

Folder Heading — Bibliographic Details
Column Heading — ISBN 1
☑ Custom Headings
☐ Contains HTML Markup
Aggregation Rule (Totals Row) — Default (None)
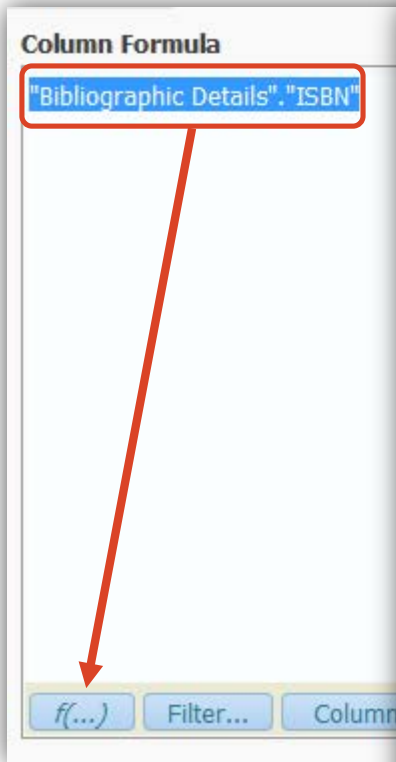
Available
Subject Areas

Column Formula
Evaluate('regexp_substr(%1,"[^\;]+", 1,1)',REPLACE("Bibliographic Details"."ISBN",';','\;'))

Edit Formula Step 1

Column Formula

"Bibliographic Details"."ISBN"

f(...)   Filter...   Column

Insert Function

Functions

- Functions
  - Aggregate
  - Running Aggregate
  - String
  - Math
  - Calendar/Date
  - Conversion
  - System
  - Expressions
  - DB Functions
    - **Evaluate**
    - Evaluate Aggregate
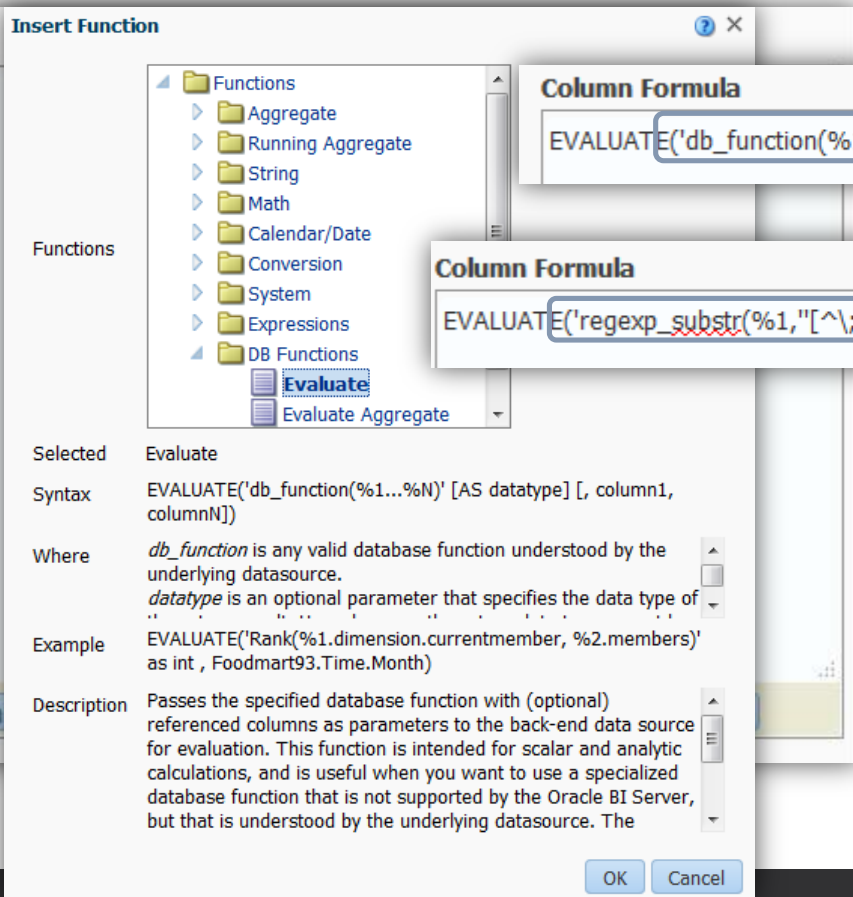
Selected   Evaluate

Syntax   EVALUATE('db_function(%1...%N)' [AS datatype] [, column1, columnN])

Where   *db_function* is any valid database function understood by the underlying datasource.
datatype is an optional parameter that specifies the data type of

Example   EVALUATE('Rank(%1.dimension.currentmember, %2.members)' as int , Foodmart93.Time.Month)
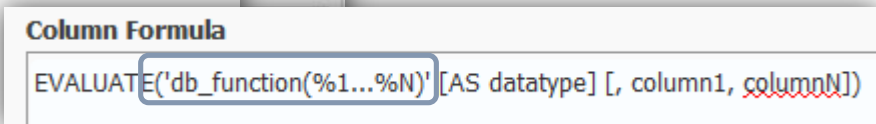
Description   Passes the specified database function with (optional) referenced columns as parameters to the back-end data source for evaluation. This function is intended for scalar and analytic calculations, and is useful when you want to use a specialized database function that is not supported by the Oracle BI Server, but that is understood by the underlying datasource. The
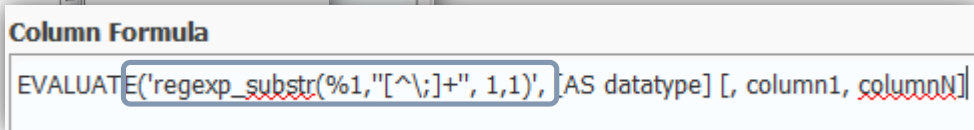
OK   Cancel

Column Formula

EVALUATE('db_function(%1...%N)' [AS datatype] [, column1, columnN])

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+", 1,1)', [AS datatype] [, column1, columnN]

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Edit Formula Step 1

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+",1,1 ' [AS datatype] [, column1, columnN]

Available

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+",1,1)',

Subject Areas

- Bibliographic Level
- Bibliographic Lifecycle
- Brief Level
- Category of Material
- Creation Date
- Creator
- Dewey Classification
- Dewey Classification Top Line
- Edition
- End Publication Date
- **ISBN**
- ISBN (Normalized)
- ISSN
- ISSN (Normalized)

f(...) Filter... Column ⌄ Variable ⌄ + - x / % ( ) | |

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Edit Formula Steps III

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+",1,1)', "Bibliographic Details"."ISBN"

| f(...) | Filter... | Column ⌄ | Variable ⌄ | + | - | x | / | % |

Insert Function

Functions
- Char_Length
- Concat
- Insert
- Left
- Length
- Locate
- LocateN
- Lower
- Octet_Length
- Position
- Repeat
- **Replace**

Selected   Replace

Syntax   REPLACE(expr1, expr2, expr3)

Where   *expr1* is any expression that evaluates to a character string. This is the string in which characters are to be replaced. *expr2* is any expression that evaluates to a character string.

Example   Replace('abcd1234', '123', 'zz')

Description   Replaces one or more characters from a specified character expression with one or more other characters.

OK   Cancel

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Edit Formula Steps IV

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+",1,1)', REPLACE("Bibliographic Details"."ISBN", expr2, expr3)

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+",1,1)', REPLACE("Bibliographic Details"."ISBN", ';', '\;'))

Evaluate('regexp_substr(%1,''[^\;]+'', 1,1)',REPLACE("Bibliographic Details"."ISBN",';','\;'))

What the Analysis Looks Like at This Point

Bibliographic Details

MMS Id	Title	ISBN 1	ISBN	ISBN	ISBN

Filters

Add filters to the analysis criteria by clicking on Filter option for the specific column in the Sele
selecting its name in the catalog pane.

🔽 ISBN is not null

Adding the Formula to All ISBN Columns
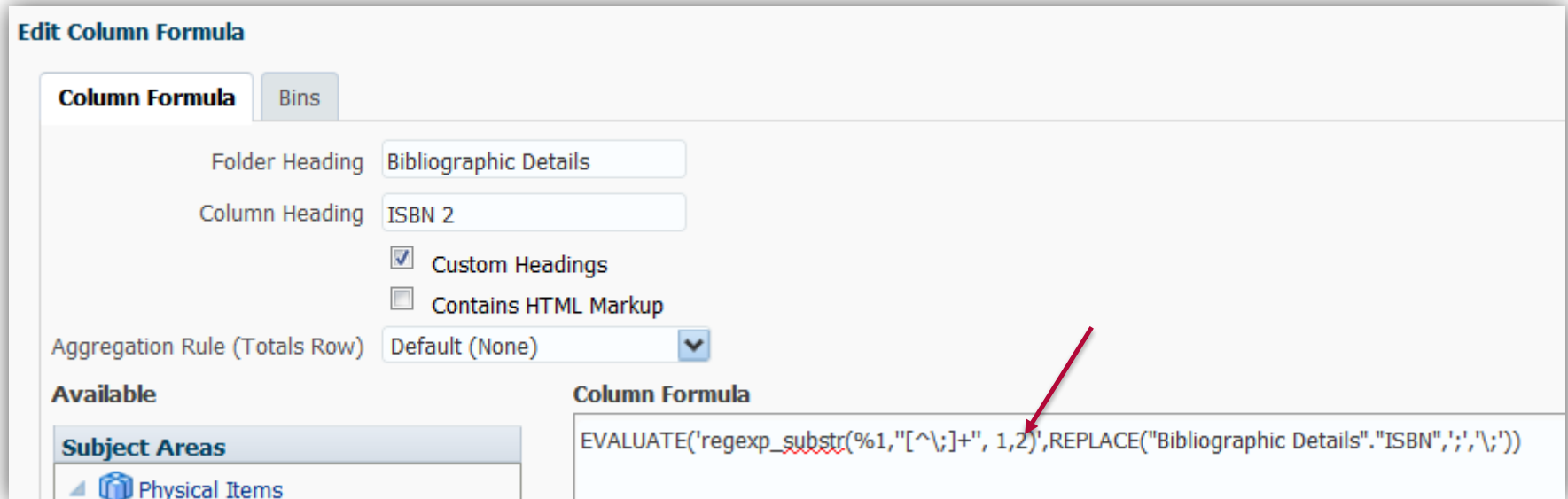
- Edit the formula for the ISBN 1 column and copy the entire EVALUATE statement

EVALUATE('regexp_substr(%1,"[^\;]+", 1,1)',REPLACE("Bibliographic Details"."ISBN",';','\;'))

- Close the ISBN 1 column and go to *Edit Formula* for the second ISBN column

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Adding the Formula to All ISBN Columns

- Customize the Column Heading, changing to ISBN 2
- Paste in the EVALUATE statement and edit as follows, changing the second appearance of **1** to a **2**

Edit Column Formula

Column Formula	Bins

Folder Heading: Bibliographic Details

Column Heading: ISBN 2

☑ Custom Headings
☐ Contains HTML Markup

Aggregation Rule (Totals Row): Default (None)

Available

Subject Areas

◢ 📦 Physical Items

Column Formula

EVALUATE('regexp_substr(%1,"[^\;]+", 1,2)',REPLACE("Bibliographic Details"."ISBN",';','\;'))

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Adding the Formula to All ISBN Columns

- Perform the same copy and paste function for the remaining ISBN columns, updating as appropriate for ISBN 3 and ISBN 4

When Complete, We Have…

Title

MMS, Title and ISBNs

Table

MMS Id	Title	ISBN 1	ISBN 2	ISBN 3	ISBN 4
991000200000541	Aura /	0374107017	0374511713	9780374107017	9780374511715
991000220000541	Freedom of the individual /	0691072086	0691019843	9780691072081	9780691019840
991000340000541	Virginia Woolf; a biography.	0151937656	0156935805	9780151937653	9780156935807
991000400000541	Byron of the Wager /	0698106695	9780698106697		
991000530000541	A dictionary of Protestant church music /	0810807882	9780810807884		
991000540000541	John Steinbeck,	0805706933	9780805706932		
991000650000541	The juniper tree, and other tales from Grimm.	0374180571	9780374180577		
991000660000541	Basque nationalism /	0874170427	9780874170429		
991000670000541	The provincial towns of Georgian England : a study of the building process, 1740-1820 /	0773502009	9780773502000		
991000680000541	Bioenergetics /	0698106164	9780698106161		
991000690000541	Manners and murders in the world of Louis-Napoleon /	0295954310	9780295954318		
991000700000541	Anthropology : perspective on humanity /	0471838691	9780471838692		
991000710000541	Money, whence it came, where it went /	0395198437	9780395198438		
991000720000541	The Dilemmas of euthanasia /	0385097301	9780385097307		
991000730000541	Uncontrollable spending for social services grants /	0815718136	9780815718130		
991000740000541	The evolution of economic thought /	0155250027	9780155250024		
991000750000541	Masterworks of the British cinema /	0064300609	0064386147.	9780064300605	

Adding Actions Links to an Analysis

Introduction

- Action links may be used to allow more interactivity in reports and dashboards

- Using drill-throughs, one report can feed into another

- One way to make large reports into more manageable chunks

- Involves two or more analyses that are linked together

Introduction

- Using the E-Inventory subject area, we'll create several analyses that are linked together

- Goal is to obtain a list of Electronic Collections and create a link to the Electronic Portfolios part of those collections

- As described on the previous slide, creating a report like this makes a potentially very large report much more manageable

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The Master Query

E-Inventory
- ▷ 📁 Portfolio
- ▷ 📁 Portfolio Activation Date
- ▷ 📁 Portfolio Creation Date
- ▷ 📁 Portfolio Modification Date
- ▷ 📁 Portfolio Library Unit
- ▷ 📁 Portfolio License
- ▷ 📁 Portfolio PO Line
- ▷ 📁 Electronic Collection
- ▷ 📁 Electronic Collection Library Unit
- ▷ 📁 Electronic Collection License
- ▷ 📁 Electronic Collection Material Type
- ▷ 📁 Electronic Collection PO Line
- ▷ 📁 Electronic Collection Type
- ▷ 📁 Bibliographic Details
- ▷ 📁 Dewey Classifications
- ▷ 📁 LC Classifications
- ▷ 📁 Service Type
- ▷ 📁 Vendor Interface
- ▷ 📁 Portfolio Details for Consortia
- ▷ 📁 Institution

Selected Columns

Double click on column names in the Subject Areas pane to add them to the analysis. Once hovering over the button next to its name.

Electronic Collection	Portfolio	
📄 Public Name ☰	📄 Material Type ☰	📄 No. of Portfolio (In Repository) ☰

Filters

Add filters to the analysis criteria by clicking on Filter option for the specific column in the Se selecting its name in the catalog pane.

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The Master Query

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The Master Query

The Master Query

Select Column

- E-Inventory
  - ▷ Portfolio
  - ▲ Portfolio Activation Date
    - **Portfolio Activation Date**
    - Portfolio Activation Month Key
    - Portfolio Activation Month
    - Portfolio Activation Full Month
    - Portfolio Activation Quarter
    - Portfolio Activation Year
    - Portfolio Activation Fiscal Month Key
    - Portfolio Activation Fiscal Year
    - Portfolio Activation Date Filter
  - ▷ Portfolio Creation Date
  - ▷ Portfolio Modification Date
  - ▷ Portfolio Library Unit
  - ▷ Portfolio License
  - ▷ Portfolio PO Line
  - ▷ Electronic Collection
  - ▷ Electronic Collection Library Unit
  - ▷ Electronic Collection License
  - ▷ Electronic Collection Material Type

OK   Cancel

New Filter

Column   Portfolio Activation Date

Operator   is greater than

Value   01/01/2016

Add More Options ▾   Clear All

☐ Protect Filter

☐ Convert this filter to SQL

OK   Cancel

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The Master Query

The Master Query

Title		
Electronic Collections by Material Type and Number of Portfolios		

Public Name	Material Type	No. of Portfolio (In Repository)
	Book	8
	Unknown	28
Brill Online Journals	Journal	14
Ebook Library	Book	8
Elsevier ScienceDirect eBook - Information Management pre-2008	Book	178
Free E- Journals	Journal	150
	Unknown	2
Gale Cengage Financial Times Historical Archive	Newspaper	2
Gale Cengage Shakespeare Collection Periodicals	Journal	106
	Newspaper	8
Highwire Press Journals	Journal	2
PubMed Central	Journal	22
Sage Open Access Journals	Journal	330
SpringerLink Books Springer Reference De German 2017	Book	24
US Government Documents	Journal	44
ebrary Perpetual Titles	Book	2

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The Details Query

The Details Query

The Details Query

The Details Query

The Details Query

The Details Query
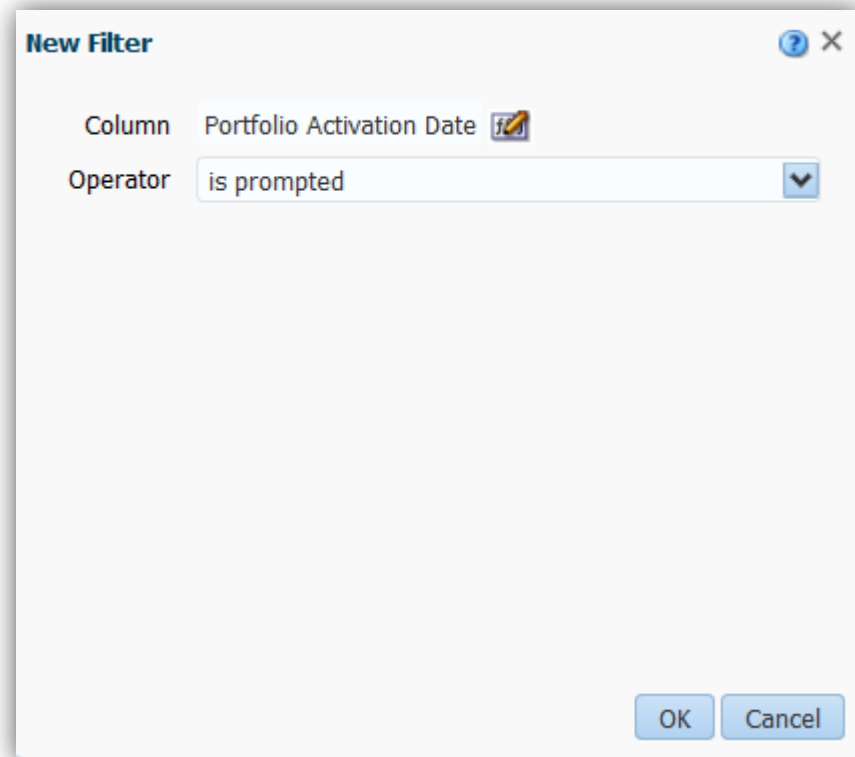
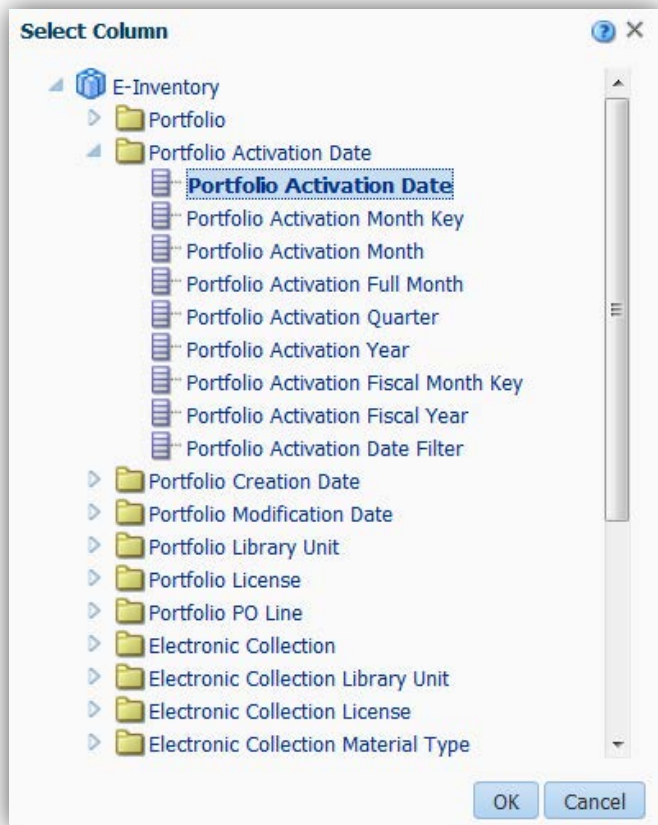⊿ 📦 E-Inventory
  ▷ 📁 Portfolio
  ▷ 📁 Portfolio Activation Date
  ▷ 📁 Portfolio Creation Date
  ▷ 📁 Portfolio Modification Date
  ▷ 📁 Portfolio Library Unit
  ▷ 📁 Portfolio License
  ▷ 📁 Portfolio PO Line
  ▷ 📁 Electronic Collection
  ▷ 📁 Electronic Collection Library Unit
  ▷ 📁 Electronic Collection License
  ▷ 📁 Electronic Collection Material Type
  ▷ 📁 Electronic Collection PO Line
  ▷ 📁 Electronic Collection Type
  ▷ 📁 Bibliographic Details
  ▷ 📁 Dewey Classifications
  ▷ 📁 LC Classifications
  ▷ 📁 Service Type
  ▷ 📁 Vendor Interface
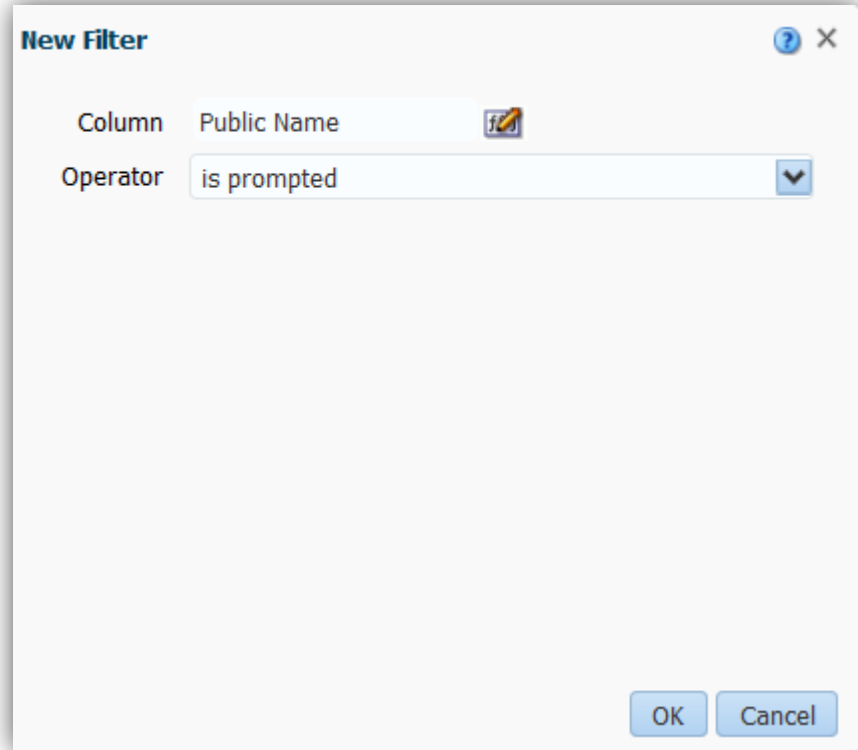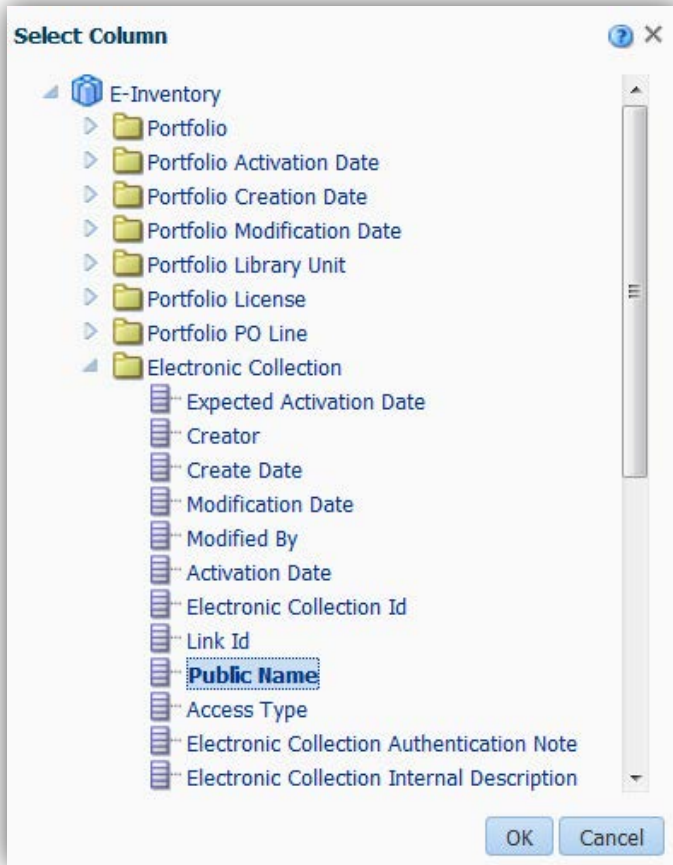 ▷ 📁 Portfolio Details for Consortia
  ▷ 📁 Institution

⊿ Selected Columns

Double click on column names in the Subject Areas pane to add them to the a
hovering over the button next to its name.

Electronic Collection	Portfolio	Bibliographic Details
📋 Public Name 📝	📋 Material Type 📝	📋 Author 📝 📋 Title 📝

⊿ Filters

Add filters to the analysis criteria by clicking on Filter option for the specific col
selecting its name in the catalog pane.

🔽 Availability is prompted
AND 🔽 Portfolio Activation Date is prompted
AND 🔽 Public Name is prompted

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Return to the Master Query

Open *Electronic Collections by Material Type and Number of Portfolios.*

Double click on column names in the Subject Areas pane to add them to the analys hovering over the button next to its name.

Electronic Collection	Portfolio	
📋 Public Name ☰	📋 Material Type ☰	📙 No. of Portfolio (In Repository)

◢ **Filters**

Add filters to the analysis criteria by clicking on Filter option for the specific colum selecting its name in the catalog pane.

▽ Availability is equal to / is in Available

AND ▽ Portfolio Activation Date is greater than 01/01/2016

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More on the Master Query

Double click on column names in the Subject Areas pane to add them to the analysis. Once added, drag-and-drop hovering over the button next to its name.

Electronic Collection	Portfolio	
Public Name	Material Type	No. of Portfolio (In Repository)

- Sort ▶
- Edit formula
- Column Properties
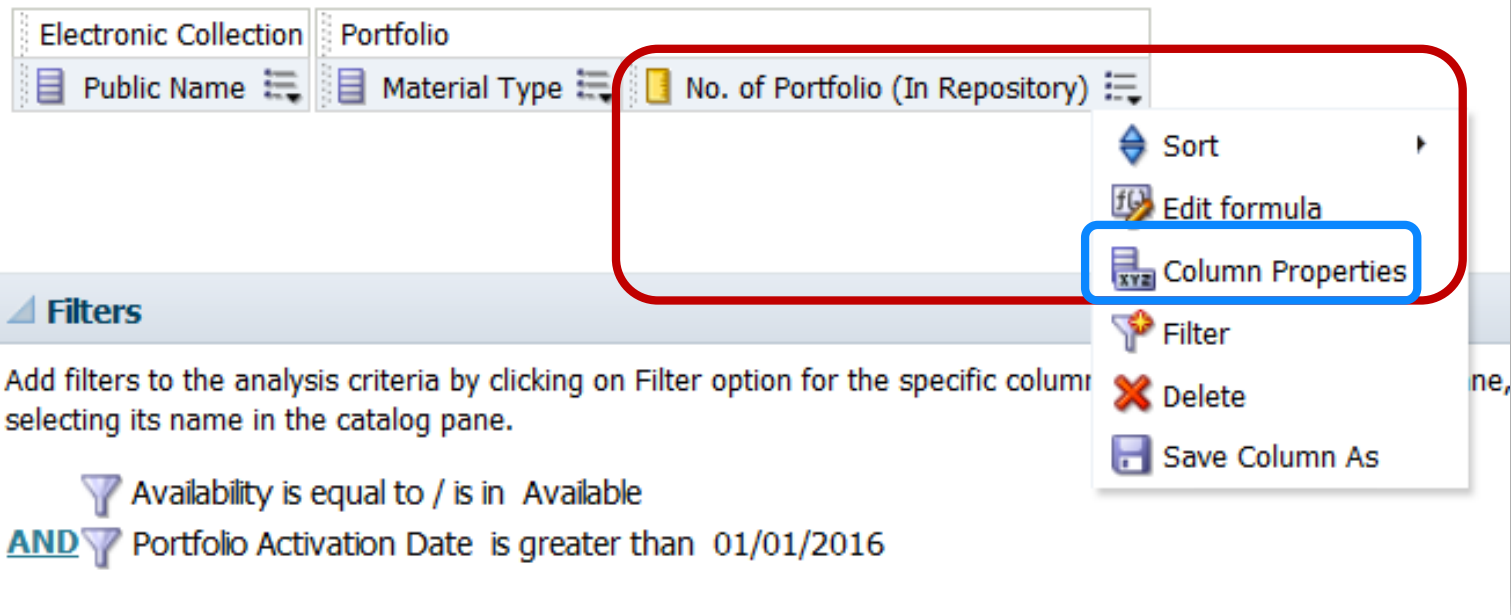- Filter
- Delete
- Save Column As

◢ Filters

Add filters to the analysis criteria by clicking on Filter option for the specific column selecting its name in the catalog pane.

Availability is equal to / is in Available

AND Portfolio Activation Date is greater than 01/01/2016

More on the Master Query

More on the Master Query

New Action Link ...

Link Text: Click here for details

Action:

Show Link: ● Always ○ Conditionally

- 🟢 Navigate to BI Content
- 🟢 Navigate to a Web Page
- 🟢 Invoke a Web Service
- 🟢 Invoke a Java Method
- 🟢 Invoke a Browser Script
- 🟢 Invoke Server Script
- 🟢 Invoke an HTTP Request

OK

Select BI Content For Action

Open In

Folders

/My Folders

▷ 📁 My F
▷ 📁 Shar

- 📁 Connie
- 📊 My Dashboard
- 📁 Subject Area Contents
- 📊 Electronic Collections by Material Type and Number of Portfolios
- 📊 Electronic Collections by Material Type and Number of Portfolios with Action Link to Portfolios
- 📊 Fines and Fees Aging
- 📊 Fines and Fees Aging Pivot Table View

Name

Electronic Collections by Material Type and Number of Portfolios with Action Link to Portfolios

Description

More on the Master Query

More on the Master Query

New Action Link ...

Link Text: Click here for details

Action: Electronic Collections by Material Type and Number

Show Link: ⦿ Always ⦾ Conditionally

Column Properties

Style | Column Format | Data Format | Conditional Format | **Interaction**

Column Heading

Primary Interaction: Default (Drill)

Value

Primary Interaction: Action Links

Action Links

Link Text	Action
Click here for details	Electronic Collections by Material Type and Number of Portfolios

☐ Do not display in a popup if only one action link is available at runtime

☐ Enable on Totals

More on the Master Query

Electronic Collections by Material Type and Number of Portfolios

Table

Public Name	Material Type	No. of Portfolio (In Repository)
	Book	8
	Unknown	28
Brill Online Journals	Journal	14
Ebook Library	Book	8
Elsevier ScienceDirect eBook - Information Management pre-2008	Book	178
Free E- Journals	Journal	150
	Unknown	2
Gale Cengage Financial Times Historical Archive	Newspaper	2
Gale Cengage Shakespeare Collection Periodicals	Journal	106
	Newspaper	8
Highwire Press Journals	Journal	2
PubMed Central	Journal	22
Sage Open Access Journals	Journal	330
SpringerLink Books Springer Reference De German 2017	Book	
US Government Documents	Journal	44
ebrary Perpetual Titles	Book	2

Click for details

Results from Details Query

Electronic Collections by Material Type and Number of ...

Electronic Collections by Material Type and Number of Portfolios with Action Link to Portfolios

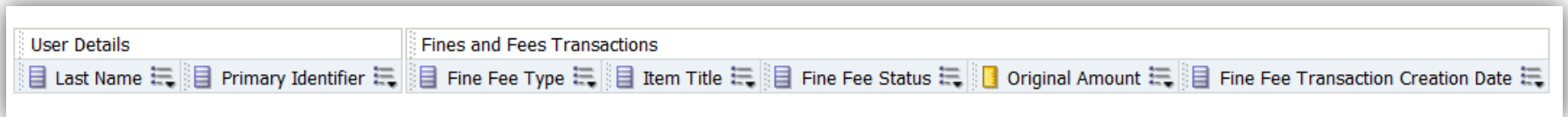| Public Name	Material Type	Author	Title
Sage Open Access Journals	Journal		AERA open.
			ASN neuro.
			Academic pathology.
			Acta radiologica open.
			Adsorption science & technology
			Advances in mechanical engineering.
			Air, soil and water research.
			American journal of men's health.
			Analytical chemistry insights.
			Antiviral chemistry & chemotherapy.
			Autism & developmental language impairments.
			Big data & society.
			Biochemistry Insights.
			Bioinformatics and biology insights.
			Biomarker insights.
			Biomarkers in cancer.
			Biomedical engineering and computational biology.
			Biomedical informatics insights.
			Bone and Tissue Regeneration Insights
			Brain and neuroscience advances.

Fines and Fees Aging Report

Introduction

- Looking for a report that shows aging of fines and fees in defined numbers of days

- We tried adding an Advanced SQL filter and received errors

- What do we do?

Fines and Fees Aging

Fines and Fees Aging

Fines and Fees Aging

Fines and Fees Aging

- Edit the Column Formula statement to change it from…

Column Formula

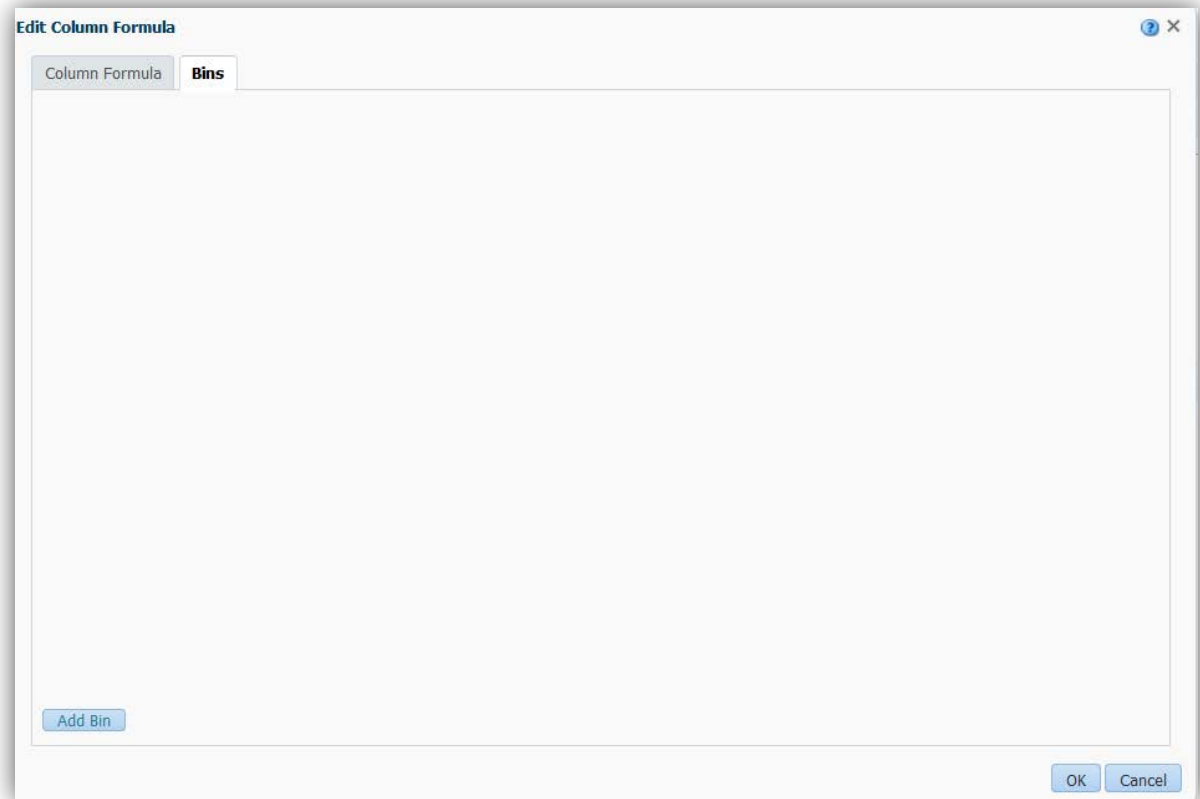"Fines and Fees Transactions"."Fine Fee Transaction Creation Date"

Column Formula

TIMESTAMPDIFF(SQL_TSI_DAY, "Fines and Fees Transactions"."Fine Fee Transaction Creation Date", CURRENT_DATE)

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Fines and Fees Aging

- Edit the formula for the **Days Aged** column again, this time going to the *Bins* tab.

Fines and Fees Aging

Fines and Fees Aging

Fines and Fees Aging

Fines and Fees Aging

Fines and Fees Aging

Title

Fines and Fees Aging

Table

Last Name	Primary Identifier	Fine Fee Type	Item Title	Fine Fee Status	Original Amount	Days Aged
	None	Card renewal		Closed	180	> 180
		Damaged item fine		Closed	60	> 180
		Lost item process fee		Closed	35	> 180
		Lost item replacement fee		Closed	70	> 180
		Other		Closed	10	> 180
		Overdue fine		Closed	117	> 180
			A subtreasury of American humor /	Closed	25	> 180
			Aging, society and life course / Leslie A. Morgan, Suzanne R. Kunkel.	Closed	25	> 180
			Big structures, large processes, huge comparisons /	Closed	25	> 180
			Chocolate : food of the gods /	Closed	25	> 180
			Cooperative games and sports	Closed	25	> 180
			Developing attitude toward learning,	Closed	22	> 180
			Development of language	Closed	25	> 180
			Driving climate change : cutting carbon from transportation /	Closed	25	> 180
			Fraction fun /	Closed	1,173	> 180

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Fines and Fees Aging

CONCAT(CONCAT("User Details"."First Name",' '),"User Details"."Last Name")

Fines and Fees Aging

Fines and Fees Aging – Pivot Table View

Fines and Fees Aging

Pivot Table

Days Aged	Fine Fee Type	Patron	Primary Identifier	Item Title	Active
					Original Amount
61 - 90	Overdue fine	Dominic Nast	dominic.nast	The natural world of Winnie-the-Pooh : a walk through the forest that inspired the Hundred Acre Wood / Kathryn Aalto.	$25.00
		Leslie Farrell	100033	Motivation, altruism, personality and social psychology : the coming age of altruism / Michael Babula, University of Greenwich, UK.	$25.00
		Napoleon Gulley	100043	Managing interactive media projects / Tim Frick.	$25.00
> 180	Card renewal	Sara Carr	sarac		$5.00
	Credit	Laurie Welling	laurie.welling	The snow leopard / Peter Matthiessen.	-$75.00
		Matthew Ball	100003	Artful universe expanded / John D. Barrow.	-$75.00
	Damaged item fine	Carmen Freeman	carmen.freeman		$40.00
		Daria Jetson	daria.jetson		$40.00
		George Morgendorf	george.morgendorf		$40.00
		Huey Sandiego	huey.sandiego		$40.00
	Library Card Replacement	Carmen Freeman	carmen.freeman		$10.00
		Daria Jetson	daria.jetson		$10.00
		George Morgendorf	george.morgendorf		$10.00
		Huey Sandiego	huey.sandiego		$10.00

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Fines and Fees Aging – Pivot Table View

Days Aged	Fine Fee Type	Patron	Primary Identifier	Item Title	Active Original Amount
61 - 90	Overdue fine	Dominic Nast	dominic.nast	The natural world of Winnie-the-Pooh : a walk through the forest that inspired the Hundred Acre Wood / Kathryn Aalto.	$25.00
		Leslie Farrell	100033	Motivation, altruism, personality and social psychology : the coming age of altruism / Michael Babula, University of Greenwich, UK.	$25.00
		Napoleon Gulley	100043	Managing interactive media projects / Tim Frick.	$25.00
> 180	Card renewal	Sara Carr	sarac		$5.00

◢ Layout

Drop/drop measures, columns and hierarchies to determine pivot table layout.

Pivot Table Prompts Σ [XYZ]

Drop here for Pivot prompts

Sections Σ [XYZ]

Drop here for a sectioned Pivot

Pivot Table [XYZ]

Columns Σ [XYZ]

Fines and Fees Transactions	▤ Fine Fee Status
Measure Labels	

Rows Σ [XYZ]

Measures

Fines and Fees Transactions	User Details	Fines and Fees Transactions	Fines and Fees Transactions
▤ Days Aged	▤ Fine Fee Type	▤ Patron	▤ Primary Identifier	▤ Item Title	🗋 Original Amount

ExLibris

Fines and Fees Aging – Pivot Table View

Fine Fee Type	Patron	Primary Identifier	Item Title		Fine Fee Status	61 - 90 Original Amount	> 180 Original Amount
Card renewal	Sara Carr	sarac			Active		$5.00
Credit	Laurie Welling	laurie.welling	The snow leopard / Peter Matthiessen.		Active		-$75.00
	Matthew Ball	100003	Artful universe expanded / John D. Barrow.		Active		-$75.00
Damaged item fine	Carmen	carmen freeman			Active		$40.00

◢ **Layout**

Drag/drop measures, columns and hierarchies to determine pivot table layout.

Pivot Table Prompts Σ [⊞]

    Drop here for Pivot prompts

Sections Σ [⊞]

    Drop here for a sectioned Pivot

Pivot Table [⊞]

Columns Σ [⊞]

Fines and Fees Transactions	📋 Days Aged 📝
Measure Labels	📝

Measures

Fines and Fees Transactions
🟧 Original Amount 📝

Rows Σ [⊞]

Fines and Fees Transactions	User Details	Fines and Fees Transactions	
📋 Fine Fee Type 📝 Σ	📋 Patron 📝 Σ	📋 Primary Identifier 📝 Σ	📋 Item Title 📝 Σ	📋 Fine Fee Status 📝

Fines and Fees Aging – Pivot Table View

Title							
Fines and Fees Aging Pivot Table View							

Pivot Table							
						61 - 90	> 180
Fine Fee Type	Patron	Primary Identifier	Item Title		Fine Fee Status	Original Amount	Original Amount
Card renewal	Sara Carr	sarac			Active		$5.00
Credit	Laurie Welling	laurie.welling	The snow leopard / Peter Matthiessen.		Active		-$75.00
	Matthew Ball	100003	Artful universe expanded / John D. Barrow.		Active		-$75.00
Damaged item fine	Carmen Freeman	carmen.freeman			Active		$40.00
	Daria Jetson	daria.jetson			Active		$40.00
	George Morgendorf	george.morgendorf			Active		$40.00
	Huey Sandiego	huey.sandiego			Active		$40.00
Library Card Replacement	Carmen Freeman	carmen.freeman			Active		$10.00
	Daria Jetson	daria.jetson			Active		$10.00
	George Morgendorf	george.morgendorf			Active		$10.00
	Huey Sandiego	huey.sandiego			Active		$10.00
Lost item replacement fee	Carmen Freeman	carmen.freeman			Active		$75.00
	Daria Jetson	daria.jetson			Active		$75.00
	George Morgendorf	george.morgendorf			Active		$75.00
	Huey Sandiego	huey.sandiego			Active		$75.00

Next Steps, Support Resources and Feedback

Next Steps and Resources

- Include documentation links in the CKC relative to your topic:

  - [Analytics Documentation](#)

  - [Creating Analyses and Dashboards](#) (Oracle)

- Additional support resources within the ExLibris Ecosystem:

  - [Idea Exchange](#)

  - [Developer Network](#)

- [2018 Technical Seminar Presentations](#) (Cross-Product section of CKC)

Any Final Questions?

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Thank You!