MODIFYING EVERGREEN REPORT TEMPLATES

Pinpoint, View, and Analyze Data Points
To Get the Information You Need

westchester LIBRARY SYSTEM

Empowering libraries. Empowering communities.

Today's Objectives

At the end of the session, you'll know

- How to change a report without changing the template

- How to rearrange or remove columns or filters

- How to change and add filters

- How to add data points to the template

- Starting from scratch

- How to turn what you want to know into a template

- How to modify an existing template to set up a recurring report

Essentials to turn what you want to know into a template

- Write out what you want
  - Ask the question or write out a statement
  - Sketch a table that shows the columns and rows you expect to see
  - Decide how you need to limit the data
- Find an existing template with similar fields so you can modify it
  - Search; Limit to Name or Description (Descriptions include key terms)
  - Browse shared subfolders. Start with templates created by WLS staff
  - Send an email to me at support@wlsmail.org for suggestions
- Start from the *Create a new Template for this folder* link in a subfolder

Essential Questions

Can I
- change the report definition instead of the template to get the results I want?
- remove or rearrange columns?
- change the WAY date information displays?
- change a filter operator to find and display different information?
- add a data point to the display?
- get completely different information than is in an existing template?

The Work Table and Sample Output

Work Table

What output do I want? *I need a list of juvenile users with date of birth so I can update their profile to teen*	
Columns You Want	*Barcode, name, profile, DOB, last checkout date*
What Are the Limits?	*My library patrons, profile, DOB, checkout in last year*
Similar Existing Template	*List users with date of birth v2*
Fields to Add	*--*
Fields to Remove	*Address columns, phone*
Filters to Add	*Last checkout date, DOB*
Filters to Modify - How?	*--*
Filters to Remove	*--*

Sample Output

First Name	Last Name	Barcode	Profile	Last Checkout Date

The Work Table and Sample "Count" Output

Work Table

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Fields to Remove	*Address columns, phone*
Filters to Add	*Last checkout date, DOB*
Filters to Modify - How?	*--*
Filters to Remove	*--*

Shelving Location	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2
Audiobook	0	0	0	0	0	0	0	0	0
Business & Finance	0	0	0	0	0	0	0	0	0
Fiction	0	0	0	0	0	0	0	0	0
Job Information Center	0	0	0	0	0	0	0	0	0
New Book	0	0	0	0	0	0	0	0	0
New Nonfiction	0	0	0	0	0	0	0	2	4
Nonfiction	0	2	3	3	2	0	4	2	4
Reference	0	0	0	0	0	0	0	0	0
Spanish Language	0	0	0	0	0	0	0	0	0

The Work Table

What output do I want?	
Columns You Want	
What Are the Limits?	
Similar Existing Template	
Fields to Add	
Fields to Remove	
Filters to Add	
Filters to Modify - How?	
Filters to Remove	

Want a true table?
Add *Rows You Want* to the list

Search For the Right Template

Search for term in *Name* field and the folder

- Evergreen.reports

- WLS Shared Report Templates

- Collections (WEST), Circulation (WEST), etc.

Browse the above folders

Contact me through the Help Desk

Edit an Existing Output to Get a Different Report

You can use one template to create different reports. When you set up a report, you create a report definition and an output. From an existing output, choose different filter options to create a different report

- **Click the *output name*. At the right side of the pink box, click *Edit*.**
- Example: Use the *Copy Status v2* template to set up different reports for
  - Missing, Lost, Available soon
- Example: Use the Filter by Library, Shelving Location, and Circ Modifier template to
  - Set up a report of new movies
  - Set up a report to move new Fiction to Fiction
  - Set up a report to change Express to New

Column	Transform	Action	User Params
Call Number/Volume -> Call Number Label	Raw Data	Between	YA / - And - / YA Z
Call Number/Volume -> Owning Library	Raw Data	In list	S_NOR NOR S_RYE RYE / Add Del / RYE
Copy/Shelving Location -> Location ID	Raw Data	In list	Video Game Westchester Reference YA Audiobooks & Movie YA Biography / Add Del / YA Biography YA College Info YA Express Item YA Fiction YA Graphic Book
Item -> Is Deleted	Raw Data	Equals	f

Report Definition Changes – Pivot Columns

Changing the Pivot Label Column changes the output display and ease of understanding.

Month Circ Count	Audiobook	Audiobook MP3	Available In Storage	Biography	Boardbook
2021-07	142	1	0	82	88
2021-08	138	0	2	70	98
2021-09	122	0	0	77	73

Report Name:	WNR J circ 2021 Q3
Report Description:	
Report Columns:	**Shelving Location Name** **Month Circ Count** **Circ ID**
Pivot Label Column:	Shelving Location Name ▾

Shelving Location Name	2021-07	2021-08	2021-09
Audiobook	142	138	122
Audiobook MP3	1	0	0
Available In Storage	0	2	0
Biography	82	70	77
Boardbook	88	98	73

Essential Terms

Term	Meaning/Use
Report Components	• Template - Identifies the source and type of information needed • Report Definition - Identifies the specific information needed • Output - The final product for that instance
Source	• The dataset from which you can choose data points • A template uses ONE source • Aged (privatized) data sources must be used to get historical circulation, hold, and other data
Source Path	• Lists available data points and Linked data • Choose any data point that doesn't have a "link" icon • To use a "link" data type, open the tree to the next level
Transform	• Ways a datapoint can display or function in your output • Most data points use Raw Data

Essentials For Making Template Changes

The basic process

1. Select an existing template.
2. Clone the template (choose one of your folders)
3. In the template modification screen

    1. Rename – must be unique – version numbers can be helpful
    2. Edit Display Fields and/or Filters
    3. Write definition to match display and filters
    4. Save

4. Run test report
5. Re-modify as needed

Delete unneeded templates; reports and outputs will also be deleted
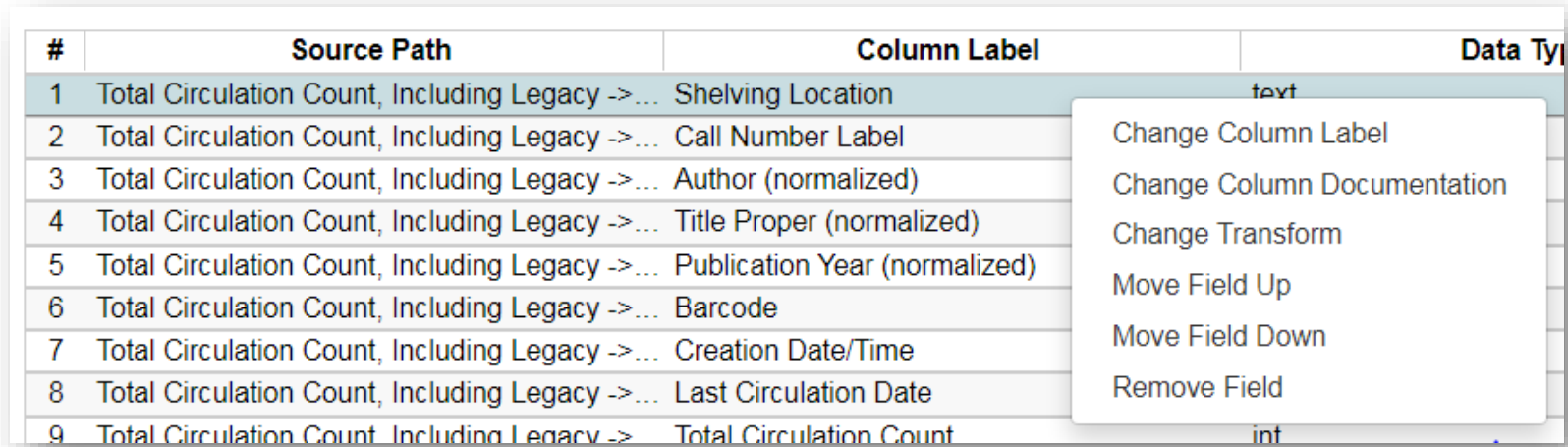
Changing existing display columns

Display Fields are

- Columns in list reports
- Can be columns or rows in count reports (using the Pivot Column menu)
- Can be easily remove or reorder report columns.

Right click a row to

- Remove it
- Move it up one row
- Move it down one row
- Change the Column Label (what displays in column header)
- Change the Transform (see slide 12)

#	Source Path	Column Label	Data Ty
1	Total Circulation Count, Including Legacy ->...	Shelving Location	text
2	Total Circulation Count, Including Legacy ->...	Call Number Label	
3	Total Circulation Count, Including Legacy ->...	Author (normalized)	
4	Total Circulation Count, Including Legacy ->...	Title Proper (normalized)	
5	Total Circulation Count, Including Legacy ->...	Publication Year (normalized)	
6	Total Circulation Count, Including Legacy ->...	Barcode	
7	Total Circulation Count, Including Legacy ->...	Creation Date/Time	
8	Total Circulation Count, Including Legacy ->...	Last Circulation Date	
9	Total Circulation Count, Including Legacy ->	Total Circulation Count	int

Change Column Label
Change Column Documentation
Change Transform
Move Field Up
Move Field Down
Remove Field

Example: remove columns from a weeding template

13

Add a display field – data points

Select a data point in the source path.

- As close to the top of the directory "tree" as possible.
- Select multiple data points to add at one time if they have the same transform.
- Selections are sticky. They will be added again if you don't deselect them.

Add a display field – data points

If you don't see the data point that you need or the data point has a link icon, open the "tree.“
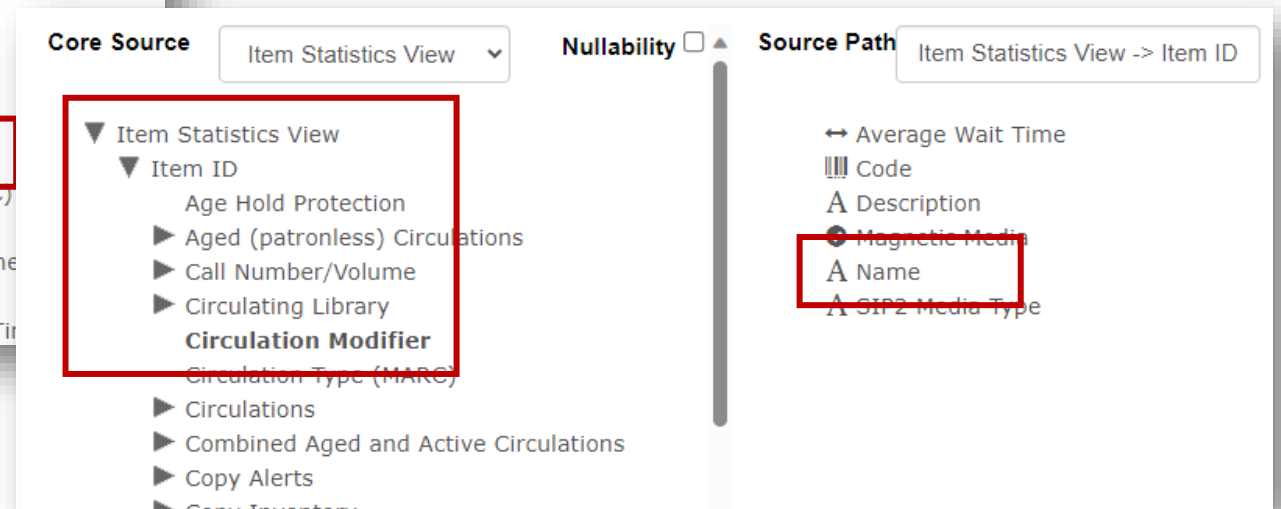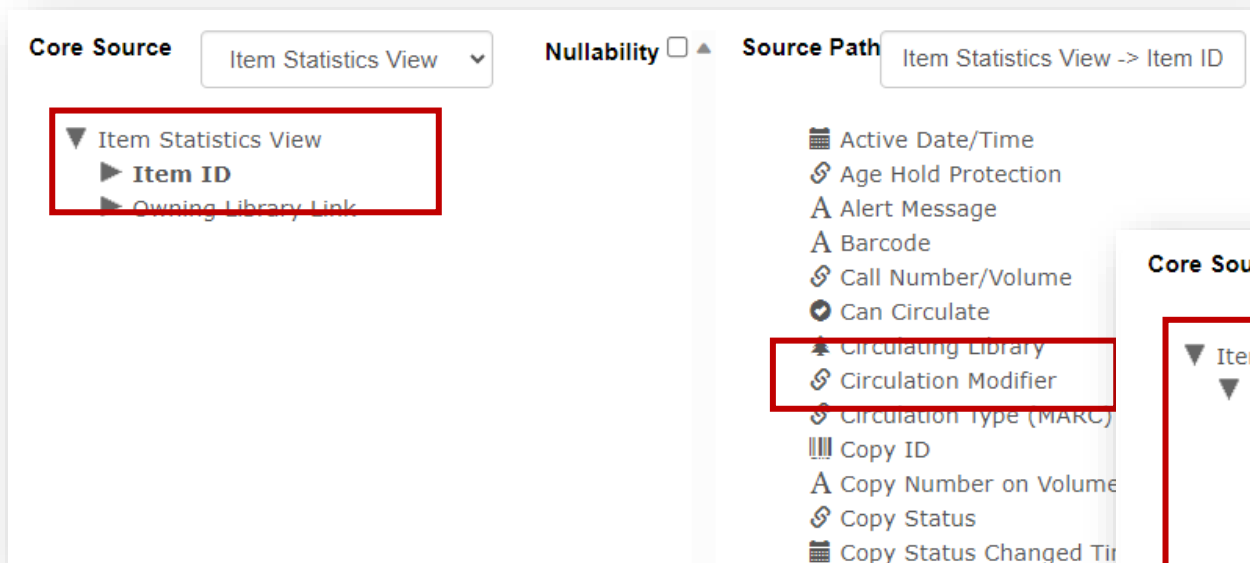
Paths to Often Used Data Points

Common title record fields

- Item > Call Number/Volume > Bib Record > Simple Record Extracts > Author, Title, Pub Date

Owning library 3-letter code in Item Source

- Item > Call Number > Owning Library > Short (Policy) Name

Item Barcode in Item Statistics View (and others)

- Item Statistics View > Item ID > Barcode Transform = Last Value

Current Patron Barcode in ILS User Source

- ILS User > Current Library Card > Barcode Transform = Last Value

Item	
Field Name	**Data Type**
Barcode	text
Call Number/Volume	link
Can Circulate	bool
Circulating Library	org_unit

Call Number/Volume	
Field Name	**Data Type**
Bib record	link
Call Number Label	text
Create Date/Time	timestamp

Bib Record	
Field Name	**Data Type**
Record ID	id
Simple Record Extracts	link

Simple Record Extracts	
Field Name	**Data Type**
Author (normalized)	text
ISBN	text
Title Proper (normalized)	text

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Data types

DATA TYPE	DESCRIPTION	EXAMPLE FIELDS
Timestamp	An exact date and time (YYYY-MM-DD HH:MM:SS)	Creation Date/Time
Text	A field of text	Patron's Last Name
Bool	True or false	Is Deleted
Org_Unit	Organizational Unit – a number representing a library, library system, or consortium	Home Library
ID	A unique number assigned by the database to identify each record	Circ ID
Money	A monetary amount	Billing Totals
Int	Integer – a number	Remaining Renewals
Interval	A period of time	Circulation Duration
Link	A link to another database table	Bib Record

Add display fields - transforms

1. Choose a data point.

2. Choose a transform.

Every piece of information exists as raw data. The raw data can be transformed to display and/or act differently.

The transform can be chosen

- When the data point is added

- After the data point is in the Display Fields list.

Transform

Raw Data
First Value
Last Value
Count
Count Distinct
Min
Max
Substring
Lower case
Upper case
First 5 characters (for US ZIP code)
First contiguous non-space string

Date

Raw Data
First Value
Last Value
Count
Count Distinct
Min
Max
Day of Week
Day of Month
Day of Year
Week of Year
Month of Year
Quarter of Year
Hour of day
Date
Year + Month
Year
Hour
Day Name
Month Name
Age
Months ago
Quarters ago

Changing transforms

You can change the transform to

- modify the data coming from the fields to be more readable
  - Example: Timestamp
  - Raw Data: YYYY-MM-DD HH:MM:SS (2017-04-06 22:14:15)
  - Transform: Display as Date, Day of the month, Day of the week, Year+Month, Year, etc
- Count data (e.g., total number of circulations or patrons added)
  - Count tallies totals, including duplicates
  - Example: Total number of circulations for month
  - Count Distinct tallies total number, but excludes duplicates
  - Example: Total number of titles that circulated in a month
- Display the last/maximum or first/minimum
  - Example: The last date a copy status changed

Common Transforms

- Raw Data
  - The data as it is in the database
  - The most commonly used option
  - Can be "transformed" to display in another way or with a different functions
- Count
  - Tallies totals, including duplicates
  - Example: Total number of patrons added
  - To count by a date interval, like a month or week, use correct date transform and include the ID datapoint for what you want to count
    (Example: circ by month – add Circ ID and Checkout Date/Time - Month)
- Count Distinct
  - Tallies total number, but excludes duplicates
  - Example: Total number of titles that circulated in a month
- Last Value or Max are the most recent instance
- First Value or Min are the first or oldest instance

Add Field

1. Click Add Field.
- Add fields in the order that you want them to display so you don't have to move them up or down

OR

- Right-click a column for options: change the column label, move up or down, change transform, remove, etc.

2. Move fields until the display – the columns – are in the order you'll want them

Changing Existing Filters

- Fields used to identify the information to include and exclude from the final output
- You can
  - Change the transform
  - Change the operator
  - Change the filter value
  - Remove the filter value
  - Remove Field (the filter)

| Display Fields | Filters | | | | | | |

Changing Existing Filters

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Display Fields | Filters

Add Fields

Actions ▾ | Rows 25 ▾ | Page 1 ▾

#	Source Path	Name	Column	Data Type	Operator	Field Transform	Filter Value
1	Total Circulation Count, Includi...	Location ID	id	id	In list	Raw Data	
2	Total Circulation Count, Includi...	Organizational Unit ID	id	org_unit	In list	Raw Data	
3	Total Circulation Count, Includi...	Call Number Label	label	text	Contains Matching substring (i...	Raw Data	
4	Total Circulation Count, Includi...	Is Deleted	deleted	bool	Equals	Raw Data	
5	Total Circulation Count, Includi...	Checkout Date/Time	xact_start	timestamp	Less than or equal to	Date	

Change Column Documentation
Change Transform
Change Operator
Change Filter Value
Remove Filter Value
Remove Field

22

Filter essentials

- Common Filters
  - In most item templates, **include** the *"is deleted?"=F* filter
  - In most circ templates, **exclude** the "is deleted?" filter
  - In most patron templates, include the *"is Active?=T* filter
  - To create a list of options, choose the *"ID"* datapoint and use the "In List" operator
  - If a filter is added, it must be filled out when the report is run
- Common Operators: Between, Contains, In List (use ID datapoint), Is Null, Is not NULL
- Transform: data type must match what works with your operator

Changing filters

1. Right-click the filter.
2. Choose what you want to change.
3. Choose from the menu.

- Enter Filter values in the data format that matches the data transform in the column field. Multiple values are comma separated
  - Sample: List Patrons with fines BELOW a certain amount. Filter to find items for a date AFTER instead of a date BEFORE (change an operator)
  - Sample: Change the type of date filter from a monthly report to a date range. Change both:
    - the transform from Month+Year to Date
    - the operator from Equals to Between
- Enter a text filter value EXACTLY as it displays in Evergreen, case sensitive

Practice

- Weeding template that removes unneeded fields
- Patrons whose cards are expiring between two set dates. (Patron Name, card #, Date expire)
- Items in a shelving location by the number of Circs eg. Any item that has circ'd more that 30 times in Fiction regardless of age, last circ date, etc.
- A dynamic report that could run monthly by shelving location that includes circ counts. ex. shelving location bestseller and circs from the previous 30 days
- Report of patrons who will be deleted from the database because of lack of activity. Patron Name, Card number, contact info

Sample: Juvenile Patrons With DoBs and Alerts

1. Start with *List Patrons With Date of Birth v2*
2. Remove Display Fields: Mailing and Phone fields
3. Add Display Fields: Alerts, Notes Title, Notes Content (all raw data)
4. Add Filter: Last checkout date (Date)
5. Change operator: Greater than or equal to

Links and Resources

Help Links

- Evergreen Reports Essentials
- Evergreen Reports – Recurring Reports Training Slides 9-21-2022 (printable)
- Purchase Alert Reports

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