



# EVERGREEN REPORTS: RECURRENCES

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Set Up Reports That Run  
"Automatically"



# Today's Objectives

Once a report is set up that provides reliable output, you can schedule a report to run on a regular basis, such as a monthly patron list, missing or lost item report, and get an email that tells you the report has run.

## **At the end of the session, you'll know**

- How to set up
  - reports that run periodically – every week, month, quarter, or year
  - recurrence outputs
  - relative date filters
  - template changes for recurrences
- How to retrieve the output to see the information

# Essentials

- Test and run a report several times to make sure it gives you the data that you want before you set up a recurrence.
- Remember that you can often set up display columns, search, and download csv files using Patron Search.

# Essential Terms

Term	Meaning/Use
Report Components	<ul style="list-style-type: none"><li>• Template - Identifies the source and type of information needed</li><li>• Report Definition - Identifies the specific information needed</li><li>• Output - The final product for that instance</li></ul>
Report Parts	<ul style="list-style-type: none"><li>• Display Fields – columns in the output</li><li>• Filters – limit the data</li></ul>
Transform	<ul style="list-style-type: none"><li>• Each datapoint exists as raw data</li><li>• The chosen transform changes the datapoint's format, display, and/or functionality</li></ul>
Operator	<ul style="list-style-type: none"><li>• Determines how data is limited</li><li>• Some transforms and operators are often used together</li></ul>

# Set the Recurrence Interval

This is the only step needed for reports with no date filter.  
Example: Run monthly Missing reports based on the *List Items By Copy Status* template.

1. Go to the most recent output of a report.  
Click the report name and then *Edit*.  
The report editor opens.
2. Enter a new Report Name and verify the filter options.
3. In Output Options, select the Recurring Report check-box and set the recurrence interval
  1. Choose a numerical frequency
  2. Choose the type of interval.  
For instance, for monthly reports, choose 1 Month(s)
4. Check the box in the date line and enter the next date of the day when you want the report to run. Use YYYY-MM-DD format. For instance, to run on the 14th day of each month, enter the YYYY-MM-14 for the next month.

Limit output to  Completed Items

Select	report	run_time	complete_time	runner	email	fol
<input type="checkbox"/>	<a href="#">TEST GRE missing 2 test2</a>	2021-04-23 12:52	2021-04-23 12:53	<a href="#">allisonmidgley</a>		8
<input type="checkbox"/>	<a href="#">TEST GRE missing 2</a>	2021-04-23 12:51	2021-04-23 12:52	<a href="#">allisonmidgley</a>		8
<input type="checkbox"/>	<a href="#">GRE Missing TEST</a>	2021-04-23 12:25	2021-04-23 12:26	<a href="#">allisonmidgley</a>		8

name	description	template	create_time	recur	recurrence	owner	edit
GRE Missing TEST		<a href="#">List Items by Copy Status</a>	2021-04-23 12:25	f	1 day	1772	<a href="#">View</a> / <a href="#">Edit</a>

**Output Options**

- Excel Output
- CSV Output
- HTML Output
  - Bar Charts
  - Line Charts

Recurring Report:

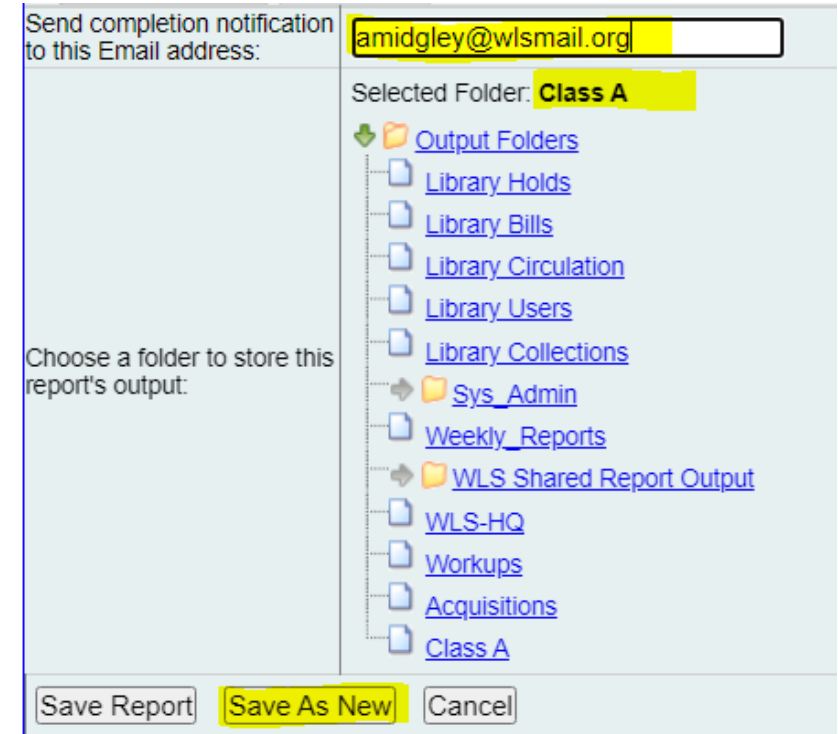
Recurrence Interval:

Run as soon as possible

# Set Up Email Notification

1. In the *Send completion notice...* box, enter an email address to receive completion notification emails.
2. Verify the folder for the report's output.
3. Click *Save as New*. An Action Succeeded dialog box displays.
4. Click OK.

When the report runs, you'll receive an email with a link to the report output. Go to Evergreen Reports and access the output in the Output folder.



The screenshot shows a dialog box with the following elements:

- Send completion notification to this Email address:** A text input field containing the email address `amidgley@wlsmail.org`.
- Selected Folder:** A dropdown menu showing `Class A`.
- Choose a folder to store this report's output:** A tree view of folders including:
  - Output Folders
  - Library Holds
  - Library Bills
  - Library Circulation
  - Library Users
  - Library Collections
  - Sys\_Admin
  - Weekly\_Reports
  - WLS Shared Report Output
  - WLS-HQ
  - Workups
  - Acquisitions
  - Class A
- Buttons:** `Save Report`, `Save As New` (highlighted in yellow), and `Cancel`.

# Changing Date Filters

Example: Get a quarterly report of juvenile materials circ.

Use Count Circulation by Checkout Library, Shelving Location, and Date Range

1. Go to the desired output, click on the report name, and click *Edit* to open the report editor. Enter a new report name and Update the date filter
  - change the dropdown menu to Relative date. This will keep the interval in the filter, but update it for the dates preceding your run date.
  - Use the date filter to choose the number of intervals
  - For this example, for the last quarter, choose
    - Relative / 90 Days(s) ago
    - Relative / 1 Day(s) ago
2. Verify other filter entries and set up output recurrence intervals, email notification, and click *Save as New*.

User Params	
Real Date	2020-01-01
Real Date	
Relative Date	- And -
Real Date	2020-12-31

User Params	
Relative Date	90 Day(s) ago
	- And -
Relative Date	1 Day(s) ago

# Template Changes

- Filters
- Displays



# Clone a Template to Edit the Filter

From your folders,

1. Locate the template that you want to clone, select it, choose *Clone selected template*, and click *Submit*. Your My Folders>Templates>subfolders display.
2. Select the folder where you want to save the cloned template. The report template builder displays.
3. Change the Template Name, eg. add your initials or a version number. You may want to change or write a description of the kind of filter or frequency of the report.
4. Scroll down and click Filters.

# Date Filter Transforms

- For dates, Raw Data is a timestamp with date, hour, minute, etc.
- Transforms represent the timestamp as values or relations. Examples:
  - Date – 01/02/2022
  - Day – Sunday, Monday, Tuesday, etc
  - Year+Month – 01/2022
  - Months ago – 2 = 01/2022
  - Year – 2022
  - Last Value (also Max) - most recent date – displays as a timestamp
- The transform determines the relative date option
- The Transform and operator work together

Operators
Equal
Between
Greater than
Greater than or equal to (After)
Less than
Less than or equal to (Before)

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

# Date Filter Operators

- Change the operator to
  - simplify the filter
  - allow for longer intervals
- Common matches

Operator	Transform	Example
Equal	<ul style="list-style-type: none"><li>• Month+Year</li><li>• Year</li><li>• Months Ago</li><li>• Quarters Ago</li></ul>	<ul style="list-style-type: none"><li>• October 2021</li><li>• 2021</li><li>• 5</li><li>• 1</li></ul>
<ul style="list-style-type: none"><li>• Between</li><li>• Greater than or equal to (After)</li><li>• Less than or equal to (Before)</li></ul>	<ul style="list-style-type: none"><li>• Date</li><li>• Hour of Day</li></ul>	<ul style="list-style-type: none"><li>• 2021-10-01 and 2021-10-31</li><li>• 11 (all hours after 1PM)</li></ul>

# Edit the Filter: Date Transform and Operator

1. Right-click the date filter row and Choose Change Transform.
2. Choose from the menu.
3. Right-click the date filter row and choose Change Operator
4. Choose from the menu.
5. Save Template.

The screenshot shows a data management interface with a table of filter settings. The table has columns for #, Source Path, Name, Column, Data Type, Operator, Field Transform, and Filter Value. The first row is highlighted, and a context menu is open over it, showing options: Change Column Documentation, Change Transform (highlighted), Change Operator, and Change Filter Value.

#	Source Path	Name	Column	Data Type	Operator	Field Transform	Filter Value
1	Combined Aged and Active ...	Checkout Date/Time	xact_start	timestamp	Between	Date	
2	Combined Aged and Active ...	Organizational Unit ID	id	org_unit	In list	Raw Data	
3	Combined Aged and Active ...	Location ID	id	id	In list	Raw Data	

# Date Filter Options Example

## Example

I want a monthly count of items added the previous month. The template has a date range. You can choose any one of these methods.

- A. Use the existing filter: between 2022-02-01 and 2022-02-28 and run manually
- B. In the most recent output, set Relative Dates between 1 day ago and 31 days ago; run the output on the first of the month.
- C. Change the template date filter to Month+Year Equals.
  - A. In the test report, enter a particular month in the filter – February 2021
  - B. In that output, set up the recurrence: Set Relative Date to 1
- D. Change the template date filter to Months Ago Equals.
  - A. In the test report, enter a number in the filter, in this case, 1
  - B. In that output, set up the recurrence: Set Relative Date to 1

# Recurrence Hints

- Modifying a template to filter for a longer time interval allows you more flexibility about when to run a report, as in the preceding example, choosing a month instead of date.
- Larger Transform Intervals allow you to get data about longer time ranges.
- If you want a complete month's data, like February, you can
  - A. Use the date range relative filter and set the recurrence run time to the first day of the month
  - B. Use a month or months ago filter and set the recurrence run time to any day of the next month.
- Considering your desired results, you can choose an appropriate date transform in the display to produce results for different time periods

# Stopping or Changing a Recurring Report

Sometimes you may wish to stop or make changes to a recurring report, e.g. the recurrence interval, generation date, email address to receive completion email, output format/folder or even filter values (such as the number of days overdue).

- Use the existing report and the steps above to set up a new recurring report with the desired changes.
- **Make sure that you have local report outputs.**

Delete the current report from the report folder.

**\*\* Deleting a report also deletes all output associated with it.\*\***

# Help and Links

- [Evergreen Reports Essentials on the IT Wiki](#)
- [support@wlsmail.org](mailto:support@wlsmail.org)
- Allison Midgley

