



DIGITAL LITERACY: EXCEL AND EVERGREEN

Look at Evergreen Reports as more than numbers. Use that data to analyze, see trends, and put it in larger contexts.



Today's Objectives

At the end of the session, you'll know

- Best practices for loading Evergreen reports data into Excel
- Using Count reports for overviews
- Using List reports for details
- Using Pivot tables to summarize data
- Tips and hints

Best Practices

Evergreen Reports Data in Excel

Evergreen Essentials

Template Search

Pivot Columns

Calculate grouping
subtotals

Template Search

Limit Field to **Name** by default

Limit Folder to

- Circulation (WEST)
- Collections (WEST)
- Patrons (WEST)
- WLS Shared Report Templates (WEST)

Template Search Results

Create a new report from selected template

Limit output to Start [Prev](#) [Next](#)

Select All None	name	description	docs	ui	create_time	id	owner
<input type="checkbox"/>	Count Patrons by Library and Permission Group/Profile	Counts by library and permission group. Filters include Home Library, Permission Group		WebStaff	2019-04-19 09:33	194	allisonmidgley
<input type="checkbox"/>	Count Patrons by Library and Profile By Year	Displays patron count by home library, profile and year. Filters on home library, profile, and Is deleted? (f) and Is Active? (t)		WebStaff	2021-08-10 16:10	5298	allisonmidgley
<input type="checkbox"/>	Count Patrons by Library, Profile, & Age Divisions	Counts by library, permission group, and age divisions. Filters on Home Library, Permission Group, and Is Deleted(F). Source: ILS User. AMidgley 7/14/2022		WebStaff	2022-07-20 14:11	6826	allisonmidgley

Pivot Columns

In Count report setup, choose the Pivot Label Column entry that you want to display in columns

The screenshot shows a report setup interface for 'Count Patrons by Library and Permission Group'. The 'User Params' section contains three lists of parameters:

- Top list: PUR, S_NOR, NOR, S_RYE, RYE
- Middle list: WNR, DOB, HAS, IRV
- Bottom list: ADULT, ADULT NEW, API, Acquisitions

The 'Pivot Label Column' dropdown is set to 'Home Library Permission Group', which is circled in red. The resulting pivot table is shown on the right:

Permission Group	Dobbs Ferry Pu	Hastings-on-Hu	Irvington Public	Warner Library
ADULT	5384	5651	4154	11135
CONTRACT1	3	1	0	3
CONTRACT3	1	0	6	0
COURTESY	7	37	21	2
GUEST	211	22	2	80
HOMEBOUND	1	0	4	0
INTERNET ONLY	2	0	0	1
JUVENILE	1109	456	396	2569
STAFF	44	26	23	56
TEEN	545	17	0	806
TEMP	22	13	6	38
Users	21	0	1	1
ADULT NEW	0	10	0	1
JUV NEW	0	6	0	0
SENIOR	0	1	1	0
Online Access	0	0	16	0

Calculate grouping subtotals

- In the Output setup, choose Calculate grouping subtotals to get a snapshot view of totals
- In Excel, recalculate these as autosums or sums

Output Options

- Excel Output
- CSV Output
- Calculate grouping subtotals
- HTML Output
 - Bar Charts
 - Line Charts

	A	B	C	D	E	F
1	Permission Group		Dobbs Fer	Hastings-o	Irvington F	Warner Lib
2	ADULT	0	5384	5651	4154	11135
3	CONTRACT1	0	3	1	0	3
4	CONTRACT3	0	1	0	6	0
5	COURTESY	0	7	37	21	2
6	GUEST	0	211	22	2	80
7	HOMEBOUND	0	1	0	4	0
8	INTERNET ONLY	0	2	0	0	1
9	JUVENILE	0	1109	456	396	2569
10	STAFF	0	44	26	23	56
11	TEEN	0	545	17	0	806
12	TEMP	0	22	13	6	38
13	Users	0	21	0	1	1
14	ADULT NEW	0	0	10	0	1
15	JUV NEW	0	0	6	0	0
16	SENIOR	0	0	1	1	0
17	Online Access	0	0	0	16	0
18		33067	7403	6264	4662	14738

Permission Group	Dobbs Fer	Hast
ADULT	5384	
CONTRACT1	3	
CONTRACT3	1	
COURTESY	7	
GUEST	211	
HOMEBOUND	1	
INTERNET ONLY	2	
JUVENILE	1109	
STAFF	44	
TEEN	545	
TEMP	22	
Users	21	
ADULT NEW	0	
JUV NEW	0	
SENIOR	0	
Online Access	0	
Total	=SUM(B2:B17)	

Excel Essentials

Barcode IDs

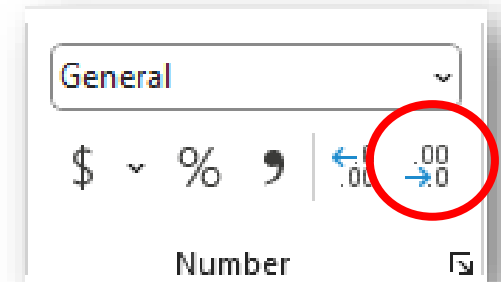
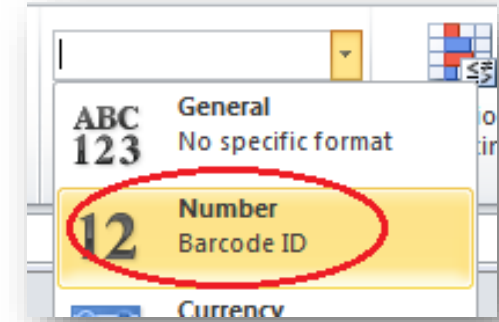
Transpose rows
and columns

Barcode ID Essentials

In Excel output, barcode IDs must be reformatted to display as 14-digit numbers

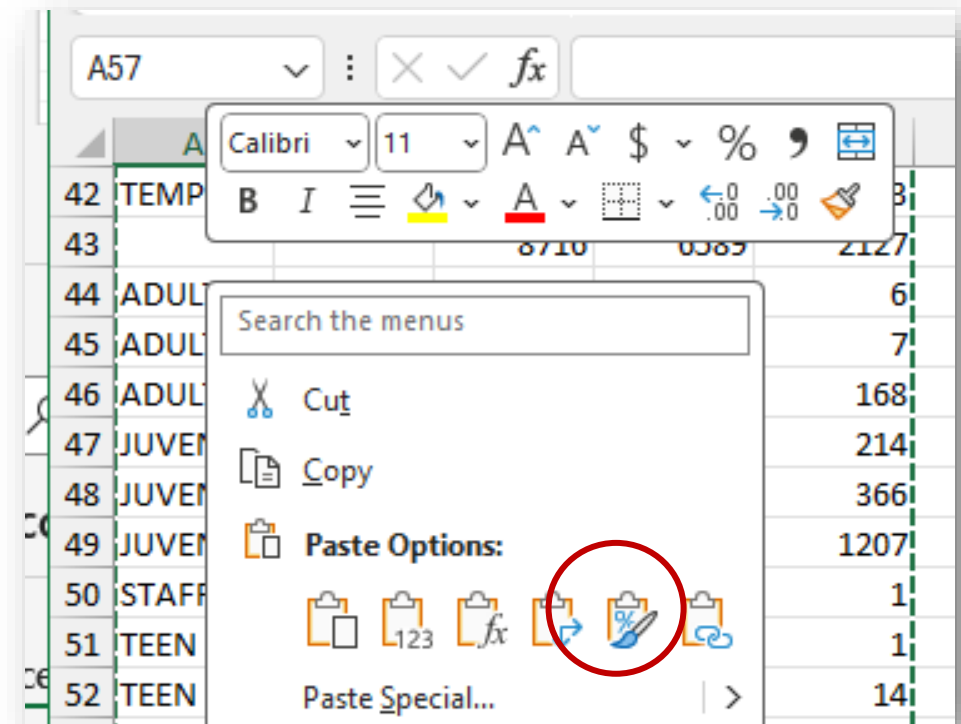
1. Select the barcode column
2. In the *Numbers format dropdown*, choose Number
Numbers will display with decimals
3. Use the decrease decimal button to remove the decimals

You can also complete 2 – 3 with a right-click and the *Format Cells...* menu.



Transpose rows and columns

1. Copy Data
2. Move to an empty cell where you want the data
3. Right click to Paste
4. Choose Transpose



Count Reports

- **Patrons**
- **Collections**

Patron Report Templates

- **Users by Profile - Count by Year Created**
- **Users by Profile - Total Count**
- **Count Users by Profile and Expiration Year**
- **Count Patrons by Library, Profile, & Age Divisions**

Search terms in **Bold** in the Name field

Profile Group		2004	2008	2010	2011	2012	2013	2014	2016	2017	2018	2019	2020	2021	2022	2023	2024
ADULT	6361	1	3	1	4	10	2	7	4	10	14	36	57	351	437	477	1222
CONTRACT1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COURTESY	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
GUEST	19	0	0	0	3	1	1	0	0	0	0	0	13	0	0	0	1
INTERNET ONLY	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
InstanceAdmin	2	0	0	Profile Group				2023	2024	2025	2026	2027	2029				
JUVENILE	1964	0	0	ADULT				477	1222	1502	1268	955	0				
Library Circulation	31	0	0	CONTRACT1				0	0	0	0	3	0				
SIP2	2	0	0	COURTESY				0	1	0	0	1	0				
STAFF	53	0	0	GUEST				0	1	0	0	0	0				
TEEN	313	0	0	INTERNET ONLY				0	0	1	0	0	0				
				InstanceAdmin				0	2	0	0	0	0				
				JUVENILE				42	274	573	722	113	0				
				Library Circulation				1	0	0	0	0	18				
				SIP2				0	0	0	0	0	0				
				STAFF				2	9	17	11	10	0				
				TEEN				14	55	44	93	45	0				
				TEMP				10	23	0	0	0	0				
								0	0	0	0	0	0				
								0	0	0	0	0	0				
								546	1587	2137	2094	1127	18				



Collection Report Templates

- Count **Annual Circulation** by **Owning** Library, Checkout Library and Shelving Location
- **Count Circulation** by Owning Library, Shelving Location, and Date Range
- Annual Circ Count By Owning Library Shelving Location, Month, & **Dewey** Tens

Search terms in **Bold**
in the Name field

Circulation Report Templates

- Count **Annual Circulation** by **Owning** Library, Checkout Library and Shelving Location
- **Count Circulation** by Owning Library, Shelving Location, and Date Range
- Annual Circ Count By Owning Library Shelving Location, Month, & **Dewey** Tens

Search terms in **Bold**
in the Name field

List Reports

- **Patrons**
- **Collections**

Patron Report Templates

Search terms in **Bold**
in the Name field

- List Patrons After a **Last Checkout Date** by Library & Profile Group
- List **Patrons** by Library Created in **Previous Month**
- **Patrons by Statistical** Category
- Patron **Email List**
- List Patrons With **No Email** Addresses
- List Patrons with **Outstanding Balances** by Home Library Between \$ and \$\$ with Item information

Collection Report Templates

Search terms in **Bold**
in the Name field

- Item **List** by **Call Number** With Circ For a Date Range
- List Titles Used **In House**
- **List Titles** With Annual Circ by **Owning** Library
(most popular titles, what you own)
- **List Titles** With **Circ** by **Checkout** Library and Date Range
(most popular titles, checked out at your library)

Pivot Tables

- **Choosing Data**
- **Choosing Data Points**
- **Choosing Values**

Pivot Tables – Choosing Data

1. Select nothing to include all the data
2. Select a data range from the sheet
 - Include all columns and rows that have data fields you may want to use
 - Consider making multiple tables. It's often easier for viewers to understand a couple data points in a few tables than more data points in one table.
3. Choose *Insert > Pivot Table*
4. Choose where you want to put the table

The screenshot shows the Microsoft Excel interface with a PivotTable dialog box open. The dialog box is titled "PivotTable from table or range" and contains the following fields and options:

- Select a table or range:** Table/Range: WNR_Item_List_By_Copy_Status_!\$B1:\$H543
- Choose where you want the PivotTable to be placed:** New Worksheet, Existing Worksheet
- Location:** (Empty text box)
- Choose whether you want to analyze multiple tables:** Add this data to the Data Model

The background shows a data table with columns: Name, Shelving Location, Call Number, Title, Author, Barcode, Status, and Last Circ Date. The data includes various book titles and their circulation status.

Pivot Tables – Choosing Data Points

- Drag data fields to
 - Rows
 - Columns
 - Values
 - Filters
- The table is created based on the fields you include
- Fields can be “nested” to create sub-categories

The screenshot shows the 'PivotTable Fields' task pane on the left and a PivotTable on the right. The task pane has a search box and a list of fields: Shelving Location, Call Number, Title, Author, Barcode, Status, and Last Circ Date. The 'Status' field is checked. Below the list are four areas: Filters, Columns, Rows, and Values. The 'Status' field is dragged to the Rows area, and 'Count of Status' is dragged to the Values area. The resulting PivotTable on the right shows the following data:

Row Labels	Count of Status
Available	572
Available Soon	1
Checked out	1
Discard/Weed	1
In transit	1
Lost	26
Lost and Paid	14
Missing	1
On holds shelf	1
Grand Total	618

Pivot Tables – Choosing Values

- Count (the number of things) is the default value.
- Drag the same or another field to provide more detail or summarize in a different way.
- Click the value dropdown to
 - choose a calculation on the value, e.g. sum, Average, etc
 - display the value as other than a number, e.g. % of grand total

The screenshot displays a PivotTable and its Value Field Settings dialog box. The PivotTable shows the count of items for various status categories, with a 'Grand Total' row. The Value Field Settings dialog box is open, showing the 'Status' field selected in the 'Base field' list. The 'Show values as' dropdown is set to '% of Grand Total', and the 'Number Format' button is visible.

Row Labels	Count of Status	Count of Status2
Available	572	92.56%
Available Soon	1	0.16%
Checked out	1	0.16%
Discard/Weed	1	0.16%
In transit	1	0.16%
Lost	26	4.21%
Lost and Paid	14	2.27%
Missing	1	0.16%
On holds shelf	1	0.16%
Grand Total	618	100.00%

Value Field Settings dialog box details:

- Source Name: Status
- Custom Name: Count of Status2
- Summarize Values By: Show Values As
- Show values as: % of Grand Total
- Base field: Status
- Base item: (empty)
- Number Format button
- OK and Cancel buttons

Top Tips

Before, During, and After

Tips & Hints - Before

Convert your question into Evergreen data fields that will tell you what you want to know

- *Draw a quick visualization of the table display, including column headers and row names. Choose a template that includes them.*
- *Consider modifying a template to include the needed data fields or data transforms (e.g. change a timestamp or date to Year or Month+Year).*

Tips & Hints - During

In Excel,

- Duplicate the tab with your data to create a working version and a master version so you can always revert to the original data
- Review the data. Sort it by several different columns and scan for inconsistencies.
 - *Do you have what you need? Rerunning the report with different filters, choosing a different template, or modifying a template can save you more time than adding or removing data from the spreadsheet.*
 - *Is the data consistent? Remember that the more consistent the data is, the easier it will be to summarize and analyze it. Consider cleaning up the data in Evergreen instead of massaging the data in Excel to be more efficient and save yourself future time (see also After).*

Tips & Hints - After

- Use the report for data cleanup. Sorting by each column allows you to see anomalies in Call number, Status, Circ Mod, etc.
- Set up recurring reports monthly, quarterly, or annually so you can easily update and/or recreate your data and analysis.

Shelving Location	Call Number
Fiction	FICTION GRISHAM
Fiction	FICTION MILLER
Fiction	FICTION ORWELL
Fiction	FICTION WILLIS
Fiction	FICTION YOURCEN
Fiction	174.24 HANNIG
Fiction	200 FRAZER
Fiction	241.4 LEWIS
Fiction	299.94 ADLER
Fiction	510.1 HOFSTADTER
Fiction	614.518 BARRY
Fiction	786.4 G
Fiction	791.45 HAYES
Fiction	940.545 P
Fiction	BEST 2023
Fiction	CD FICTION JOHAN
Fiction	CHUNG
Fiction	CLANCY
Fiction	DOSTOYEVSKY
Fiction	FIC ABBAS
Fiction	FIC ABDEL GAWAD
Fiction	FIC ANGEL-AJANI
Fiction	FIC BANNISTER
Fiction	FIC BANNISTER
Fiction	FIC BANNISTER
Fiction	FIC BAUERMEISTER
Fiction	FIC COLLINS

Help and Links

- [Evergreen Reports and Excel](#)
 - [Evergreen Reports on the IT Wiki](#)
 - [Microsoft Overview of Pivot Tables and Charts](#)
-
- Allison Midgley
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