

## Read-Only Pages In-Depth

- Review: What are Read-Only Pages and why do we need them?
  - Read-Only Pages are based on SQL Views
  - Read-Only Pages Introduction
- Understand: What tools and skills are needed?
  - Basic to Moderate SQL
  - SQL Server Management Studio
- Learn: How do we make a new Read-Only Page?



#### Review

- Hopefully this isn't your first rodeo
  - If you missed it, go back and watch the introduction. It's worth your time!
- Remember these are PAGES
- Like the name says they are READ ONLY
  - No new records, no updating, no deleting



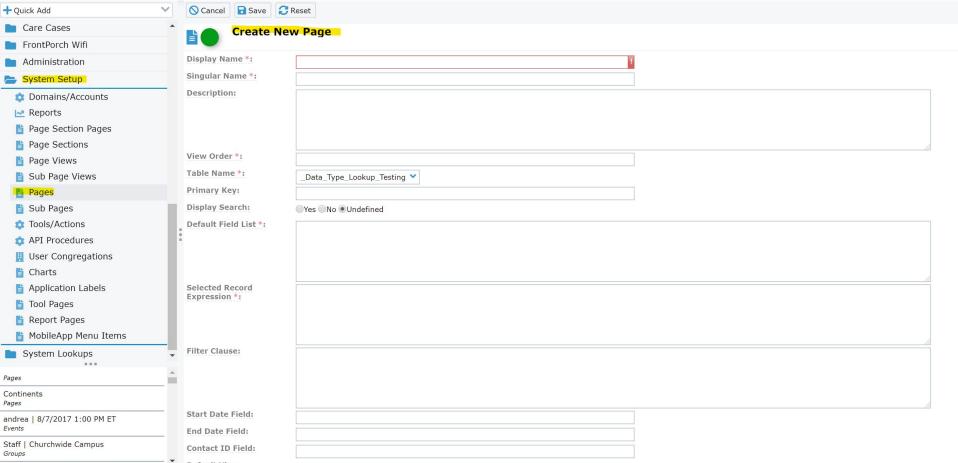
- Hopefully this isn't your second rodeo either
  - You should already have experience with \*SQL
  - You should know how to add a page to your Platform

\*not MP "sql" used in MP views and advanced searches
\*\*If you need to learn SQL, Don is doing a great class at MPUG

#### This should be familiar

```
SELECT
   Households. Household ID,
   Households. Household Name,
   YEAR(Donations.Donation Date) AS Year,
   SUM(Donation Distributions.Amount) AS Ttl
FROM
   Donation Distributions
    INNER JOIN Donations ON Donation_Distributions.Donation_ID = Donations.Donation ID
    TNNER JOTN Households
   INNER JOIN Contacts ON Households. Household ID = Contacts. Household ID ON Donations. Donor ID = Contacts. Donor Record
WHERE
   Donation Date >GETDATE()-2100
GROUP BY
   Households. Household ID.
   Households. Household Name,
   YEAR(Donations.Donation Date)
HAVING
   SUM(Donation Distributions.Amount)>5000
ORDER BY
   Household ID,
   YEAR(Donations.Donation Date)
```

## This should also be familiar





- You'll need access to your database
  - Indirect access from your PC
  - Direct server access

• SQL Server Management Studio is on your server

Microsoft
SQL Server Management Studio

vi7.91
© 2018 Microsoft.
All rights reserved.



Next - understand the difference between queries, stored procedures and views



Queries: Statements that Create, Read, Update, or Delete (CRUD) data in one or more table.

Stored procedures: A series of actions conducted in a certain order or manner. A stored procedure is a set of one or more queries that allow for dynamic parameters contained within.

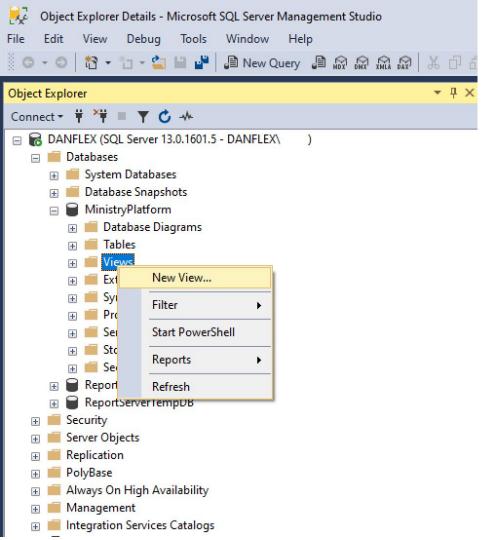
Views: Views are essentially virtual tables comprised of pre-written SQL statements. They are limited to just one SELECT query.



That's about it:)

You can use other tools - but those won't be covered today

There are system (mp) views on your server - please do not change



# Making a new View

You can jump right in if you're ready.

A view is a SELECT query so you can test it ahead of time.

I prefer to build and test my query first, then make the new view by copying/pasting my code.



YEAR(Donations.Donation Date)

# ANOTHER MP WEBINAR THANKS FOR JOINING US

## Making a new View

```
SELECT
    Households . Household ID.
   Households. Household Name.
   YEAR(Donations, Donation Date) AS Year,
   SUM(Donation Distributions.Amount) AS Ttl
   Donation Distributions
   INNER JOIN Donations ON Donation Distributions. Donation ID = Donations. Donation ID
   INNER JOIN Households
   INNER JOIN Contacts ON Household_ID = Contacts.Household_ID ON Donations.Donor_ID = Contacts.Donor_Record
   Donation Date >GETDATE()-2100
GROUP BY
    Households. Household ID,
   Households. Household Name
   YEAR(Donations.Donation Date)
   SUM(Donation Distributions.Amount)>5000
ORDER BY
    Household ID.
```

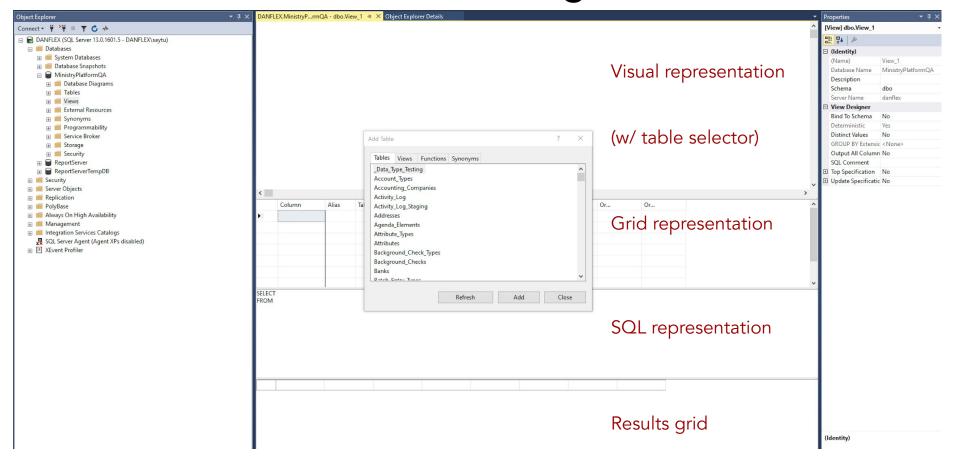
Start with a query.

Test it until you're happy with the results.

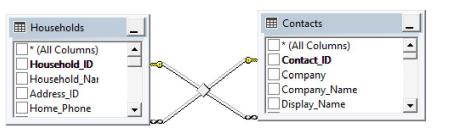
Create a new view.

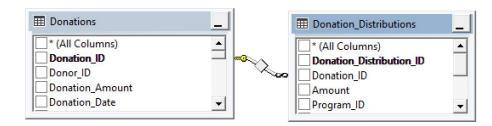
Paste your query into the designer.

## The View Designer



## The View Designer

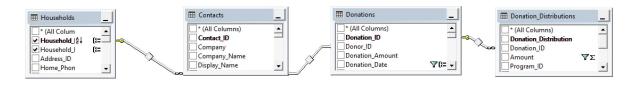




Be careful using the designer (especially the Table selector)

- Relationships are automatically added (sometimes)
- Some advanced views cannot be visually represented





Column	Alias	Table	Outp	Sort Type	Sort Order	Group By	Filter	Or	Or	Or
Household_ID		Households	~	Ascending	1	Group By				
Household_N		Households	$\checkmark$			Group By				
YEAR(dbo.Do	Year		~	Ascending	2	Group By				
Amount	Ttl	Donation	$\checkmark$			Sum	> 3000			
Donation_Date		Donations				Where	> GETDATE() - 2100			

SELECT TOP (100) PERCENT dbo.Households.Household\_ID, dbo.Households.Household\_Name, YEAR(dbo.Donations.Donation\_Date) AS Year, SUM(dbo.Donation\_Distributions.Amount) AS Ttl fROM dbo.Households INNER.JOIN

dbo.Contacts ON dbo.Households.Household\_ID = dbo.Contacts.Household\_ID INNER JOIN

dbo.Donations INNER JOIN

dbo.Donation\_Distributions ON dbo.Donations\_Donation\_ID = dbo.Donation\_Distributions.Donation\_ID ON dbo.Contacts.Donor\_Record = dbo.Donations.Donor\_ID

NHERE (dbo.Donations.Donation\_Date > GETDATE() - 2100)

 ${\sf GROUP\ BY\ dbo. Households. Household\_ID,\ dbo. Household\_Name,\ YEAR (dbo. Donations. Donation\_Date)}$ 

HAVING (SUM(dbo.Donation\_Distributions.Amount) > 3000)

ORDER BY dbo.Households.Household\_ID, Year

	Household_ID	Household_Na	Year	Ttl
•	1	Think Ministry,	2017	24284.1000
	1	Think Ministry,	2018	25715.0700
	2	Your Church	2015	23587.0000
	2	Your Church	2017	5882830.1434
	2	Your Church	2018	307424.2500
	0	Christianson	2017	24226 5000



#### Learn Make a new view

Remember - these will be treated like tables by the Platform

- Add a Domain\_ID field if you need security
- A unique Primary Key will come in handy
- You can use a dp\_Separator:bit field if needed

## Let's make a quick update to our code

```
■ SELECT
     Household ID,
    Household Name.
    Domain ID,
     [2016],
     [2017],
     [2018],
     [2019],
     [2020]
 FROM
     (SELECT TOP (100) PERCENT
         dbo.Households.Household ID,
         dbo.Households.Household Name,
         YEAR(dbo.Donations.Donation Date) AS Year,
         SUM(dbo.Donation Distributions.Amount) AS Ttl,
         1 AS Domain ID
     FROM
         dbo.Households
         INNER JOIN dbo.Contacts ON dbo.Households.Household ID = dbo.Contacts.Household ID
         INNER JOIN dbo.Donations
         INNER JOIN dbo.Donation Distributions ON dbo.Donations.Donation ID = dbo.Donation Distributions.Donation ID ON dbo.Contacts.Donor Record = dbo.
     WHERE
         (dbo.Donations.Donation_Date > GETDATE() - 2100)
     GROUP BY
         dbo.Households.Household ID,
         dbo. Households. Household Name,
         YEAR(dbo.Donations.Donation Date)
     HAVING
         (SUM(dbo.Donation Distributions.Amount) > 3000)
     ORDER BY
         dbo.Households.Household ID, Year
     ) t
 PIVOT (SUM(Ttl) FOR Year IN ( [2016], [2017], [2018], [2019], [2020], [2021])) AS Pvt
```



#### Learn Make a new view

- Views are saved, like a table, as opposed to running create scripts like Procedures
- Name the view, similar to naming a table, using a standard like:
  - vw\_my\_cool\_new\_view
  - mychurch\_donors\_by\_year

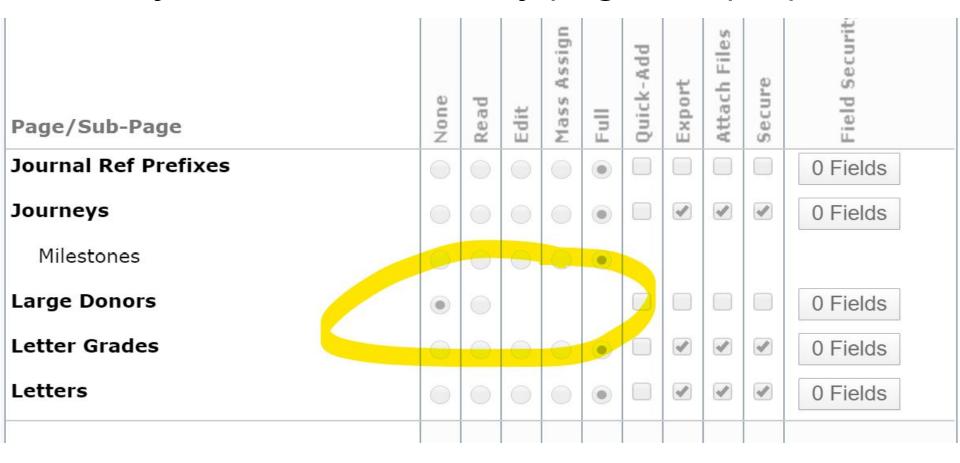
Choose Name		×
Enter a name for the view:		
vw_large_donors_by_year	-	
	OK	Cancel



#### Learn Make a new view

- Add the View as if you were adding a new Table to Pages
  - Remember to refresh your cache first :)
  - Your new view will appear in the Table\_Name field
  - Check the KB if you forgot how to do this
- Be sure to add permissions too!
  - Permission will be Read-Only

## They're called Read-Only pages on purpose



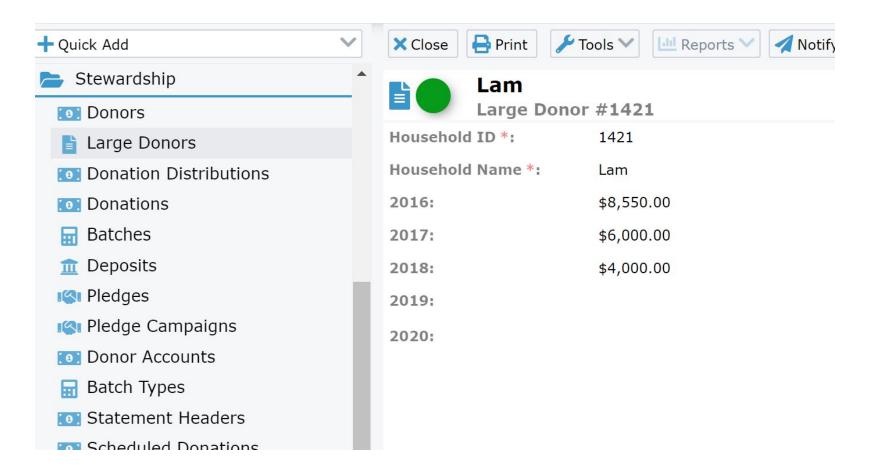


#### Learn Make a new view

- After completing all the necessary setup steps...
  - Permissions, Page Sections, Default Views, etc.
- We have a new Read-Only Page!

<b>Stewardship</b>	■ Monitzer	\$4,080.00			
o Donors	□ • Kramer	\$4,845.00			
Large Donors	□ • Lam	\$8,550.00	\$6,000.00	\$4,000.00	
Donation Distributions	□ • Lancaster	\$7,140.00			
Donations	□ • Landry	\$4,080.00			
☐ Batches	□ • Langley	\$4,845.00			
Danasite	Larson	\$7,140.00			

#### It has all the details we need

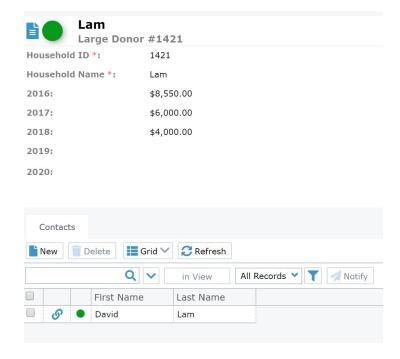




#### You can add sub-pages

- You need a primary key
- Sub-pages don't have to be read-only

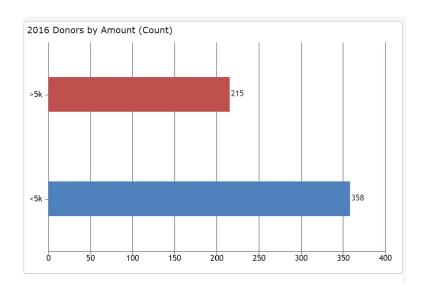
# Learn Finishing touches





# Learn Finishing touches

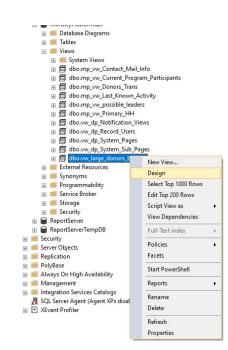
You can add charts too!





## Learn Change your view

- You can make changes if needed
- Right-click and select Design
- You'll be right back in the designer
- Remember to update the Page data if you added or removed fields





#### Thanks!

Dan Eames dan@thinkministry.com