## Results Formula Basics Webinar



### Meet Your Trainer

### Jaime Ransom Training Specialist





### Learning Objective

Help Report Writers develop a strong foundation for writing formulas in results so that users feel confident when working with the variable editor within Results reports.





## Formula Overview

## Formula Components

## General Syntax Rules



# Formula Overview



### Formula Overview

Two Common Purposes

- Customize how data is displayed
- Create custom calculations

< 6	apr		elcome:	Results 9 Formulas 8	& Context Starter Report ~ Formula Editor	
File	<u>ک</u> ،	oo 日本	C~	Formula		
V <sub>+</sub> ∼ Raw D	ata v H	ands-On 2 &	3 ∨ ⊦	⊨lf [Gender Identity_200]>="!" Then [Gender Id	dentity_200] Else "Unanswered"	×
0 🗄 ×	✓ =lf [	Gender Ident	ity_200]>	Objects	Functions	Operators
	_	_		Type here to filter objects tree     Q       V     Dimensions	Type here to filter functions tree     Q       > [x̄; All	= < <= <> > >= . +
	_	_	-	♣ Category_1841 ♣ Date of Birth_199	<ul> <li>Ear Aggregate</li> <li>Ear Character</li> </ul>	Values 7 Prompts
Name	DOB	Gender	Race	✤ Date Service Plan Created_1824 ♣ Ethnicity_1616	<ul> <li>&gt; C<sub>00</sub> DataProvider</li> <li>&gt; C<sub>00</sub> DateTime</li> </ul>	
Kyle Butler	1/1/80	Male	African A	reference of the second	> [x) Document	, After
James Monster		Male	Asian Multi-Rac	📌 Individual Service Plan_88.Record Id	> [(x) Logical	All
Kelly Johnson		Male	Asian	📌 Name_198	> [ <sub>(X)</sub> Misc	And
Sarah Johnso 4 Lauren Kelley 6		Female Female	Caucasia Asian			
Cali Bennett Caitlin Weism		Female Female	African A African A			OK Cancel





### **Four Components**

• Data

	Formula Editor	۲٦ لاع
Formula		
⊨lf [Gender Identity_200]>="!" Then [Gender Id	entity_200] Else "Unanswered"	
Objects	Functions	Operators
Type here to filter objects tree Q	Type here to filter functions tree Q	= < <= <> >= . +
V Dimensions	> [ <del>(</del> <del>x)</del> All	- / * ( )
🔂 Category_1841	> Cix Aggregate	Values
♣ Date of Birth_199	> [x Character	Prompts
📌 Date Service Plan Created_1824	> [x) DataProvider	1 :
🔶 Ethnicity_1616	> [ DateTime	;
🐣 Gender Identity_200	> $\boxed{cx}$ Document	After
🚸 Individual Service Plan_88.Record Id	> [x Logical	All
🚸 Name_198	> [x) Misc	And
	· - ·	
		OK Cancel



### **Four Components**

- Data
- Functions

	Formula Editor	Г <sup>л</sup> ц
Formula		
<mark>⊨If</mark> [Gender Identity_200]>="!" <mark>Then</mark> [Gender Id	lentity_200 <mark>] Else</mark> "Unanswered"	
Objects	Functions	Operators
Type here to filter objects tree	Type here to filter functions tree Q	= < <= <> > >= . +
✓ Dimensions	> [ <sub>cx</sub> All	- / * ( )
😚 Category_1841	> [ <sub>(X)</sub> Aggregate	Values
📌 Date of Birth_199	> [ <sub>(x)</sub> Character	Prompts
🚸 Date Service Plan Created_1824	> [ DataProvider	l :
🔶 Ethnicity_1616	> [x) DateTime	;
😚 Gender Identity_200	> [ <sub>(X)</sub> Document	After
💠 Individual Service Plan_88.Record Id	> [x Logical	All
🔶 Name_198	> [ <sub>(X)</sub> Misc	And
	· - · ·	
		OK Cancel



### **Four Components**

- Data
- Functions
- Operators

	Formula Editor	۲J
Formula		
⊨lf [Gender Identity_200 <mark>]&gt;="</mark> !" Then [Gender Id	entity_200] Else "Unanswered"	
Objects	Functions	Operators
Type here to filter objects tree Q	Type here to filter functions tree Q	= < <= <> > >= . +
V Dimensions	> Coo All	- / * ( )
🔶 Category_1841	$\rightarrow [\tilde{x}]$ Aggregate	Values
✤ Date of Birth_199	> $\left[\vec{x}\right]$ Character	Prompts
🚸 Date Service Plan Created_1824	> [x) DataProvider	l :
😽 Ethnicity_1616	> [ <sub>1,x</sub> ) DateTime	3
😽 Gender Identity_200	> $\left[\overline{x}\right]$ Document	After
🚸 Individual Service Plan_88.Record Id	> [x) Logical	All
🚸 Name_198	> [x) Misc	And
	· · ·	
		OK Cancel



### **Four Components**

- Data
- Functions
- Operators
- Syntax

	Formula Editor	23
Formula		
⊨lf [Gender Identity_200]>="!" Then [Gender Id	entity_200] Else "Unanswered"	
Objects	Functions	Operators
Type here to filter objects tree Q	Type here to filter functions tree Q	= < <= <> > >= . +
✓ Dimensions	> Eao All	- / * ( )
🔶 Category_1841	> [x] Aggregate	Values 7
✤ Date of Birth_199	> [x) Character	Prompts
🚸 Date Service Plan Created_1824	> [ <sub>(X)</sub> DataProvider	l :
😽 Ethnicity_1616	> [ <sub>(X)</sub> DateTime	;
🐣 Gender Identity_200	> [x) Document	After
🚸 Individual Service Plan_88.Record Id	> [x Logical	All
🔶 Name_198	> [x) Misc	And
	▲ <sup>¬</sup> ¬ M	
		OK Cancel



### **Four Components**

- Data
- Functions
- Operators
- Syntax

## look at the dog brown



#### **Four Components**

- Data
- Functions
- Operators
- Syntax

## Look at the brown dog.





### **Objects & Variables**

- Enclosed in brackets []
- Same name includes Query
   Name in brackets
- Select from Object box.

	Formula Editor
Formula	
⊨lf <mark> [Gender Identity_200]</mark> >="!" Then [Gender Id	entity_200] Else "Unanswered"
Objects	Functions
Type here to filter objects tree Q	Type here to filter functions tree Q
✓ Dimensions	> $\Box(x)$ All
📌 Category_1841	> [x] Aggregate
📌 Date of Birth_199	> $[\overline{(x)}$ Character
🚸 Date Service Plan Created_1824	> [x) DataProvider
📌 Ethnicity_1616	> $\boxed{(x)}$ DateTime
♣ Gender Identity_200	> $\Box(\vec{x})$ Document
🚸 Individual Service Plan_88.Record Id	> [x Logical
🚸 Name_198	> $\Box(\vec{x})$ Misc

### 🤑 Bonterra.

### Formulas

- All formulas start with =
- String values show in quotes (", not")
- Enclose all functions in parenthesis
  - \*Except If/Then
- Separate different objects within semicolon

Formula	
onnada	
<mark>⊨lf [</mark> Gender Identity_200]>="! <mark>" Then [</mark> Gender Ide	entity_200] Else <mark> "Unanswered"</mark>
bjects	Functions
vpe here to filter objects tree Q	Type here to filter functions tree Q
Dimensions	> $[\overline{cx}]$ All
🐣 Category_1841	> [ <sub>(X)</sub> Aggregate
🔶 Date of Birth_199	> $\left[ \overrightarrow{(X)} \right]$ Character
🚸 Date Service Plan Created_1824	> [ DataProvider
😽 Ethnicity_1616	> [ DateTime
🐣 Gender Identity_200	> $\left[ \widehat{(X)} \right]$ Document
🚸 Individual Service Plan_88.Record Id	> [ Logical
🕀 Name_198	> [ Misc
	· - ·



#### Importance of Identifiers

- Ensure data quality
- Basic ingredient for formulas
- Best practice to always include in Query Results

Participant Name_2	Gender_8	Record Id	Participant Name_2	Gender_8
Alvy Singer	Male	35	Asher Billingslea	Male
		239	Alvy Singer	Male
Asher Billingslea	Male	463	Austin Hill	Male
Austin Hill	Male	624	Heather Carter	Female
Heather Carter	Female	1,180	Austin Hill	Male



# **Additional Resources**



## Additional Training Opportunities

- Knowledge Base Articles Search in Chat
- On-demand Videos in our Bonterra Academy
- Free Webinars & Recordings
- Foundations Intensive Multiday Trainings that Cover the Basics
- Labs 2 hr Live Trainings on Specific Topics and Capabilities



Build confidence and knowledge in our software.



### **Customer Support**

## Reach out to our Customer Support Team with Questions or Concerns.

Weekdays 7am – 7pm CST via chat or through email: <u>apricot@bonterratech.com</u>



- Ask questions about functionality covered in this training
- Ask trainer to redo a demo
- Ask real-life application questions
- Or sign off and we will see you in the next training!





## Thank you for attending!

We hope to see you in future trainings.

