



Driving a new age of
connected planning

Model Building Tips and Tricks

Toronto User Group
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Ryan Kohn

Senior Business Partner
Customer Success



Agenda

Time Ranges

User Input Validation

Time Ranges

Introduction to Time Ranges

FY16

FY17

FY18

FY19

FY20

FY21

Previous Year

Future Year

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

Model Calendar

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

JFM|AMJ|JAS|OND

WITHIN

EXTEND
AFTER

EXTEND
BEFORE

NOT
OVERLAPPING

Why Use Time Ranges?

- Reduce Model Sparsity
- Eliminates need to set up alternate time lists
- Increases model flexibility
- Improved model efficiency

Start off using your model calendar as the base and then use time ranges when they will help provide the benefits listed above

Naming Convention

- FYxx-FYxx. For example, FY16-FY18, or FY18 for a single year
- FY16-FY19 Q (to signify Quarter totals)
- FY16-FY19 QHY (Quarter and Half Year totals)
- FY16-FY19 HY (Half Year totals only)

DEMO

Time Ranges rolling to a new Year

Starting Model Calendar
Two time ranges

		FY16	FY17	FY18	FY19	FY20
Model Calendar						
History	FY16-FY17					
Plan	FY19-FY21					

Roll Model calendar forward
Time ranges stay the same

		FY16	FY17	FY18	FY19	FY20	FY21
Model Calendar							
History	FY16-FY17						
Plan	FY19-FY21						

Determine how to handle Pr Yr data
Update / Rename time ranges

		FY16	FY17	FY18	FY19	FY20	FY21
Model Calendar							
History	FY17-FY18						
Plan	FY20-FY21						

Additional Considerations

- ALM
 - Time ranges are considered structural data
 - All changes should be made in a development model
- Sum & Lookup
 - Consider the time periods used for line items before writing these formulas
 - Make sure the inputs and results have overlapping time periods
- Time Series Functions (ie. Post, Lag, MovingSum, Cumulate)
 - Make sure the inputs and results have the same range

Looking for more information

Time Ranges:

<https://help.anaplan.com/anapedia/Content/Modeling/Dimensions/Time%20Ranges.htm>

<https://community.anaplan.com/t5/Training-Classes/Introduction-to-Time-Ranges/ta-p/30542>

<https://community.anaplan.com/t5/Shared-Best-Practices/Time-Range-Application/ta-p/30479#toc-hId--2076447299>

User Input Validation

Why validate user input?

- Lower risk of incorrect results downstream
- Reduce time spent fixing data later
- Improve end user experience by providing immediate feedback

Input Validation in Anaplan

Native in Anaplan	Some assembly required
<ul style="list-style-type: none">• Data formatting (e.g. numbers, dates, preset list of values)	<ul style="list-style-type: none">• Required vs optional fields• Ranges of values• Business rules

Conditional formatting for validation

$$\begin{aligned}
 \frac{dY}{dt} &= m_0 \left[Y \frac{dr}{dt} + \frac{r}{c^2} \left(1 - \frac{v^2}{c^2} \right)^{-3/2} \cdot a \right] \\
 \alpha &= 1 - \frac{v^2}{c^2} \Rightarrow F = m_0 a \left[\frac{1}{\alpha^2} + \frac{v^2}{c^2} \cdot \frac{1}{\alpha^{3/2}} \right] = m_0 a \left[\frac{1}{\alpha^2} + \frac{v^2}{c^2} \cdot \frac{1}{\alpha^{3/2}} \right] \\
 W &= \int F dx = \int \frac{m_0 a}{\left(1 - \frac{v^2}{c^2} \right)^{3/2}} dx = m_0 \int \frac{1}{\left(1 - \frac{v^2}{c^2} \right)^{3/2}} \cdot \frac{dv}{dt} dx = m_0 \int \frac{1}{\left(1 - \frac{v^2}{c^2} \right)^{3/2}} \cdot \frac{dv}{dt} dx \\
 m_0 \left[\frac{c^2}{-2} \int \frac{du}{u^{3/2}} \right] &= m_0 \left[\frac{-c^2}{2} \left[\frac{-u^{-1/2}}{-1/2} \right] \right] = m_0 \left[\frac{c^2}{u^{1/2}} \right] = m_0 \left[\frac{c^2}{\left(1 - \frac{v^2}{c^2} \right)^{1/2}} \right] \\
 &= -m_0 c^2, \quad \frac{1}{\sqrt{1 - \frac{v^2}{c^2}}} = \frac{m_0 c^2}{m_0 c^2} - m_0 c^2 \Rightarrow W + m_0 c^2 = m_0 c^2
 \end{aligned}$$

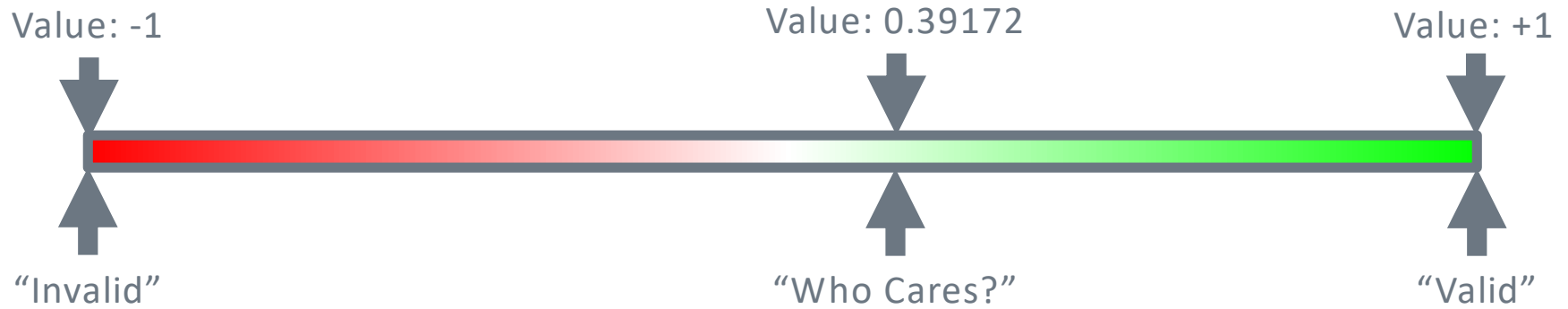
Continuous vs Discrete Variables

- A **continuous variable** can take on any value between two specific values
- A **discrete variable** can only have specific values

Continuous vs Discrete Variables

- Reminder: conditional formatting line items are continuous (i.e. numeric)
- However, **results of validation** are discrete (i.e. Valid, Invalid, or Partially Valid)
- We need to “fake” discreteness in order to configure conditional formatting for validation

Continuous to Discrete Values



In Anaplan

Edit Rule

Line item to format: Value

Based on the values from: User Entry - CF

Values and colors: 3-color scale

Minimum: -1 Mid-point: 0 Maximum: 1

Color scale: [Red] [White] [Green]

User Entry - CF IF Value > 1000 THEN 1 ELSE -1

Sample	
Value	User Entry - CF
1,200	1

Softer Colors

Messages
✓ No errors
✓ No errors
x Name must be ALL CAPS
x Start Date is blank
x End Date is before Start Date
x End Date is before Start Date; Name must be ALL CAPS
x Start Date is blank; Name must be entered

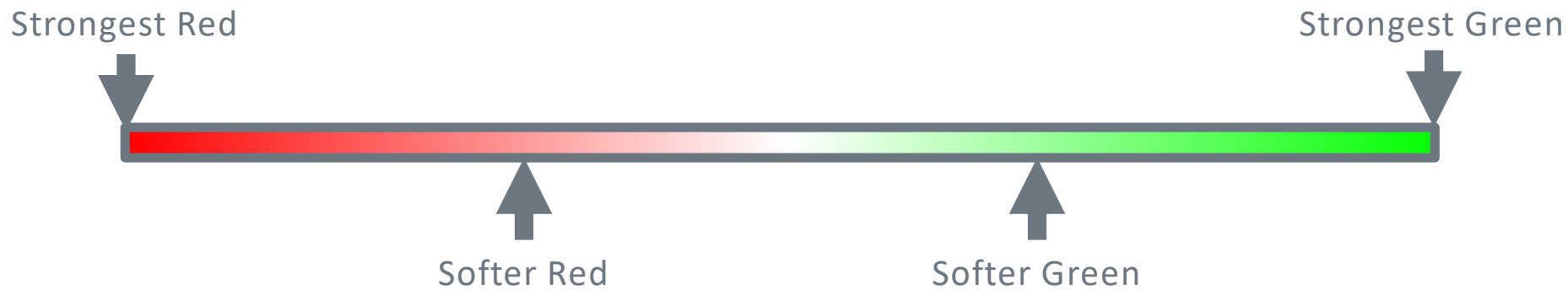
VS

Messages
✓ No errors
✓ No errors
x Name must be ALL CAPS
x Start Date is blank
x End Date is before Start Date
x End Date is before Start Date; Name must be ALL CAPS
x Start Date is blank; Name must be entered

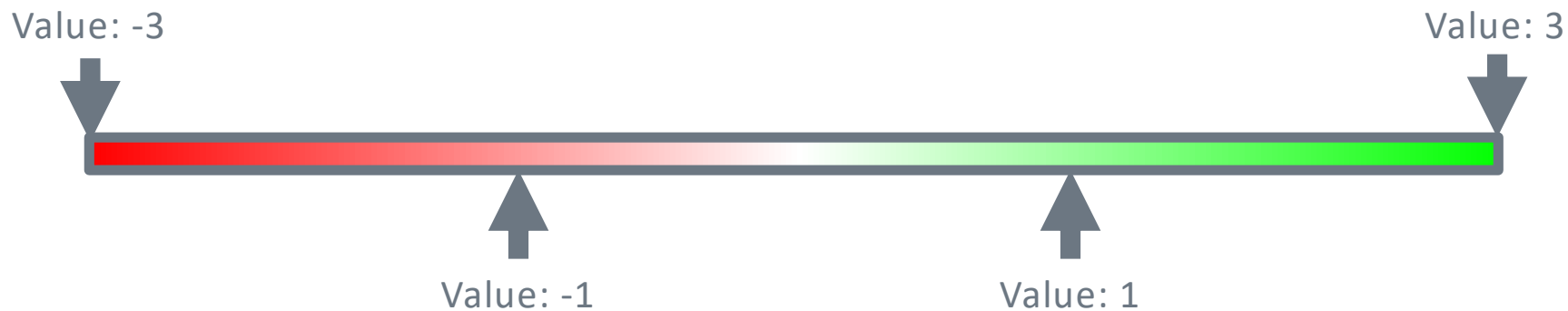
Entry
Text is hard to read

Entry
Text is easier to read

Softer Colors



Softer Colors



In Anaplan

Edit Rule

Line item to format Value

Based on the values from User Entry - CF

Values and colors 3-color scale

Minimum

Mid-point

Maximum

-3

0

3



⌵ User Entry - CF IF Value > 1000 THEN 1 ELSE -1

Sample

Value	User Entry - CF
1,200	1

DEMO

Advanced: Centralizing the Color Scheme

- **Common Configuration** module to define the intensity of the colors used
- **Tip:** Maintain a Model Builder standard for conditional formatting
 - E.g. Always use “-3”, “0”, and “3” for setting up conditional formatting, and use a common configuration module to define the discrete values
- **Consistency is key!** Especially as you build out your COE and have multiple model builders across the organization. Building these standards into your models allows end users to have a similar experience across models.

In Anaplan

Config: Conditional Formatting

Valid	1
Invalid	-1

⌵ User Entry - CF

IF Value > 1000 THEN 'Config: Conditional Formatting'.Valid ELSE 'Config: Conditional Formatting'.Invalid

Sample

Value	User Entry - CF
1,200	1



Q

A