Data Validation Rules in Planning 11.1.2.x

Goodbye to the days of JavaScript in order to enforce data input policies and rules to Planning web forms. With Planning version 11.1.2 and newer, Oracle has introduced a powerful set of tools for data validation within the Planning Data Form Designer itself. Let's walk through a scenario of how this works.

Say that we have a product mix form that will be used to input percentages as drivers for a revenue allocation. Here's what the form looks like:

Page MA 💌 🙌 Plan 💌	Working 💌	Distribution	- Go										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	14
Home Theater Audio System	8.21%	6.76%	4.27%	5.13%	6.85%	8.51%	7.83%	6.79%	12.50%	6.70%	5.79%	6.77%	-
Home Audio	14.30%	11.79%	7.43%	8.94%	11.93%	14.83%	13.65%	11.82%	19.13%	12.22%	10.09%	11.80%	
Boom Box	9.45%	7.78%	4.91%	5.91%	7.88%	6.86%	9.01%	7.81%	5.14%	6.85%	6.67%	7.79%	
Personal CD Player	5.83%	4.80%	3.03%	3.64%	4.86%	6.04%	5.56%	4.82%	6.34%	5.28%	4.11%	4.81%	
MP3 Player	9.14%	7.53%	4.75%	5.71%	7.62%	9.47%	8.72%	7.55%	7.45%	8.28%	6.45%	7.54%	
EAudio on the Go	24.41%	20.12%	12.68%	15.26%	20.36%	22.37%	23.29%	20.18%	18.93%	20.42%	17.23%	20.14%	
Audio Systems	38.72%	31.90%	20.12%	24.20%	32.29%	37.20%	36.93%	32.00%	38.05%	32.64%	27.32%	31.95%	
DVD Player	6.95%	9.06%	12.83%	11.86%	9.30%	7.39%	7.92%	9.51%	7.10%	9.55%	10.74%	10.56%	
DVD Recorder	2.36%	3.08%	4.37%	4.04%	3.17%	2.52%	2.70%	3.24%	2.42%	3.25%	3.66%	3.60%	
Portable DVD	5.86%	7.64%	10.82%	10.00%	7.85%	6.23%	6.68%	8.02%	5.99%	4.03%	4.53%	4.46%	
DVD/VCR Combo	3.71%	4.84%	6.86%	6.34%	4.97%	3.95%	4.24%	5.09%	3.80%	5.11%	5.74%	5.65%	
Digital Video	18.88%	24.62%	34.88%	32.24%	25.28%	20.09%	21.54%	25.86%	19.30%	21.94%	24.67%	24.26%	
Projection TV	7.16%	5.90%	3.72%	4.47%	5.97%	7.42%	6.83%	5.92%	7.78%	8.11%	8.42%	7.57%	
Plasma TV	8.71%	7.18%	4.53%	5.45%	7.26%	9.03%	8.31%	7.20%	9.47%	9.87%	10.24%	9.21%	
High Definition TV	8.30%	6.84%	4.31%	5.19%	6.92%	8.61%	7.92%	6.86%	9.03%	9.41%	9.76%	8.78%	
Televisions	24.17%	19.92%	12.56%	15.11%	20.16%	25.06%	23.06%	19.98%	26.29%	27.39%	28.43%	25.57%	
4 Head VCR	8.42%	10.88%	14.99%	13.14%	10.29%	8.15%	8.53%	10.23%	7.55%	8.33%	9.04%	8.42%	
Hi Fi VCR	9.81%	12.67%	17.46%	15.31%	11.98%	9.50%	9.94%	11.92%	8.80%	9.70%	10.54%	9.81%	
EVCRs	18.23%	23.55%	32.45%	28.45%	22.27%	17.65%	18.47%	22.15%	16.36%	18.03%	19.58%	18.22%	
Electronics	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00% -	+

We should expect that the sum of these percentages to be 100% at the "Electronics" parent member. If this is not the case, the revenue allocation will incorrectly allocate data across products. So how do we enforce this rule? Simple… let's take a look at the data form design.

As a row definition we've included two member selections; 1) Descendants(Seg01) or Descendants(Electronics) and 2) Seg01 or

Electronics. We are going to add a validation rule to row 2 of the data form. To do this, highlight row 2 and click the sign to add a new validation rule. Notice that in the validation rules section, it now says 'Validation Rules: Row 2'.

			Point of View 🕅 -	Grid Properties
Product Mix %	🚛 🧮 Local	93.		Rows
aCurriir	9 ₀ .			Suppress missing blocks
				Suppress missing data
I viDescendants(E01_101_1000)	an Plan		Page May	Columns
Working, What If	IChildren(All Channels)	41.		Suppress missing data
	-0.	* d *		Column width Medium
			▼ Columns	Row Properties: 2
			A	Apply to all rows
	Rows		Descendants(YearTotal)	E 164
1 Descendants(Seg01)	<u></u>			
2 Seg01	91.			C Read-only
				Show separator
				Suppress hierarchy
				Suppress missing data
				Validation Rules: Row 2 Rules at 💌

The Data Validation Rule Builder will then be launched. Let's fill in the rule. We should ensure the Location is set to 'Row 2'. We've filled in a name and quick description, then ensured that the 'Enable validation rule' check box is checked.

For the rule we've defined some simple if logic:

IF [Current Cell Value] != [Value = 1] THEN [Process Cell] ;

õ 🏈	ata Valid	ation Rule	Builder: New Rule -	Window	s Internet Explor	er					
A	dd Rule	Delete D	Ouplicate View Rule								
Lo	Location: Row 2 💌										
Na	Name: Product Mix Row 2 Validation										
De	Description: Ensure product mix sum = 100%.										
		⊠ En	able validation rule								
8	28 4	€ (†2) 1	प् _र ुप् _र								
	Con	dition	Source Type		Source Value	Operator	Ta	rget Type	Target Value	Process	Actions
Ξ	IF	V	Current Cell Value	V		!= 💌	Value	V	1 🏒	V	№ №
	THEN	V	Process Cell	V							🕹 🖞 🔊
He	elp									Validate	Ok Cancel
											7

To define what occurs if this condition is met we choose the 'Process Cell' action defined by the small gear with a letter A next to it. Here we will highlight the cell red and notify the user with a validation message.

Services Cell - Win	dows Internet Explorer	
Format Cell		
Cell Background Color :		
Validation Message:	The product mix must sum to 100%.]	×
	Display message in the Data Validation Messages pane	_
Process Managemen	t	
None C Update Pro	smotional Path C Do Not Promote	
Help		Ok Cancel

We click through to save the Process Cell definition and the Validation Rule itself and should now see the rule in the data form definition.



So let's take a look at how the end user will interact with this form. Percentages are entered by product for each month. Upon save, notice that all months for Electronics that equal 100% appear normal. December only sums to 90% and is highlighted in red as we specified in the data validation rule. We cannot limit the user's ability to save the form until the cell equals 100%; we can only notify them of the issue, and explain the cause and potential resolutions.

Page MA 💌 🚧 🏾 Plan 💌	Working 💌	Distribution	▼ Go									
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Home Audio	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Boom Box	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Personal CD Player	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
MP3 Player	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
⊟Audio on the Go	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
Audio Systems	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
DVD Player	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
DVD Recorder	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Portable DVD	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
DVD/VCR Combo	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Digital Video	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
Projection TV	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	
Plasma TV												
High Definition TV												
Televisions	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	
4 Head VCR												
Hi Fi VCR												
⊡VCRs												
Electronics	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	90.00%

Of course, this is a simple example of what can be done using Planning's Data Validation Rules. The possibilities are

endless. Oracle has more scenario walkthroughs in the Planning Administrator's Guide. View them here: http://download.oracle.com/docs/cd/E17236_01/epm.1112/hp_admin /ch08.html