



# **Xelsius 2008 Best Practices**



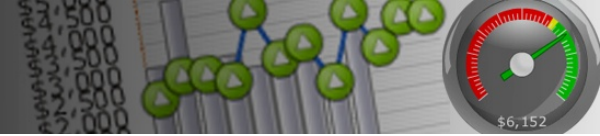
# Top Ten Best Practice Tips



- 1. Start Fresh**
- 2. Mock It Up**
- 3. Summarize Data**
- 4. Minimize Excel Functions**
- 5. Create a Company-Wide Labeling System**
- 6. Maximize Interactivity**
- 7. Maximize Real Estate using Selectors & Dynamic Visibility**
- 8. Enhance Presentation**
- 9. Automate with External Data Sources**
- 10. Export to Test in Real World Environment**



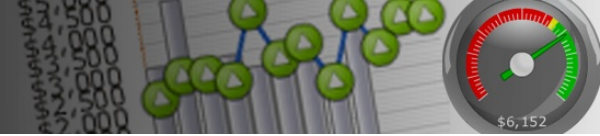
# Why Xcelsius?



- ▶ **Summary data**
- ▶ **Charts & Graphs**
- ▶ **Single Value Components**
- ▶ **Interactive**
- ▶ **Easy to Use**
- ▶ **Connectivity for automated refresh of data**



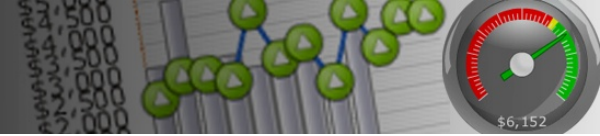
# Best Practice Tip #1



# Start Fresh



# Start Fresh



## ► Start with an Empty Spreadsheet

- Avoids importing in unsupported functions or plug-ins
- Minimizes the data to what you need to see
- Ability to organize the data using “Excel for Xcelsius” Best Practices



# EXCEL – Unsupported Features

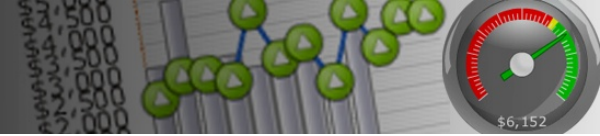


## ► Excel Features **NOT** Supported in Xcelsius 2008:

- Macros
- Conditional Formatting
- Pivot Tables
- Filters
- Connectivity
- Add-Ins



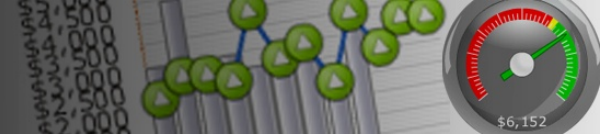
## Best Practice Tip #2



# Mock It Up



# Design on Paper



- ▶ **Create a rough design on paper**
  - Speeds the design process when creating within Xcelsius
  - Ability to use the paper design as a sign off



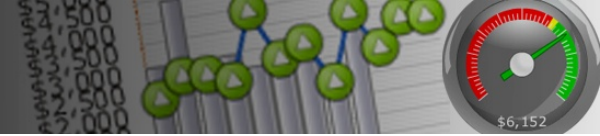
# Create an Xcelsius Mock Up



- ▶ **Create a template of the design using the components and visibility with dummy data**
  - Use for a second level of approvals on concept and design
  - Use to iron out any potential issues
  - Use to organize your data in the best way to accommodate the functionality of the components
  - Use to test interactivity of components & determine if more or less is necessary



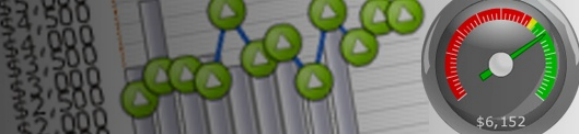
## Best Practice Tip #3



# Summarize Data



# Summarize Data



- ▶ **Core functionality of Xcelsius is to visually represent summarized data in an interactive way**
  - Too much data slows the dashboard
  - Makes the dashboard unmeaningful
  - Should be able to quickly glance at the dashboard and gain immediate knowledge

- ▶ **Consider Using Open Document URL to drill into a more detailed report in Web Intelligence or Crystal Reports**



- ▶ **General Open Document Syntax:**

`http://<servername>:<port>/OpenDocument/opendoc/<platformSpecific>?<parameter1>&<parameter2>&...&<parameterN>`

- ▶ **Example:**

- ▶ `http://<servername>:<port>/OpenDocument/opendoc/<platformSpecific>?sType=wid&sDocName=SalesReport&iDocID=2010&lsSSelect+a+City=Paris`

# Drill Down to a Webi Report



## ► Drill Down to Webi Report Functionality using Open Document URL

State	Sales revenue
California	\$7,479,569
Colorado	\$2,060,275
DC	\$2,961,950
Florida	\$1,879,159
Illinois	\$3,022,968
Massachusetts	\$1,283,707
New York	\$7,582,221
Texas	\$10,117,664

California



Drill Down Webi Report

		2001	2002	2003
California	Los Angeles	\$982,637	\$1,581,616	\$1,656,676
California	San Francisco	\$721,574	\$1,201,064	\$1,336,003



## Best Practice Tip #4



# Minimize Excel Functions

- ▶ **Keep the data and logic to a minimum within Excel**
- ▶ **How?**
  - Use no more formulas than necessary –
    - Too Many Formulas? Push processing to data source. Or consider calling external data based on selections.
  - Use simple over complex formulas
  - Reference base cell rather than reference cell
  - Remove Dummy Data used at Design Time
- ▶ **Why?**
  - Decreases the file size
  - Speeds up the interactivity (calculation time slows interactivity)
  - Minimizes the time and work necessary
  - Minimizes amount of time to load the SWF file

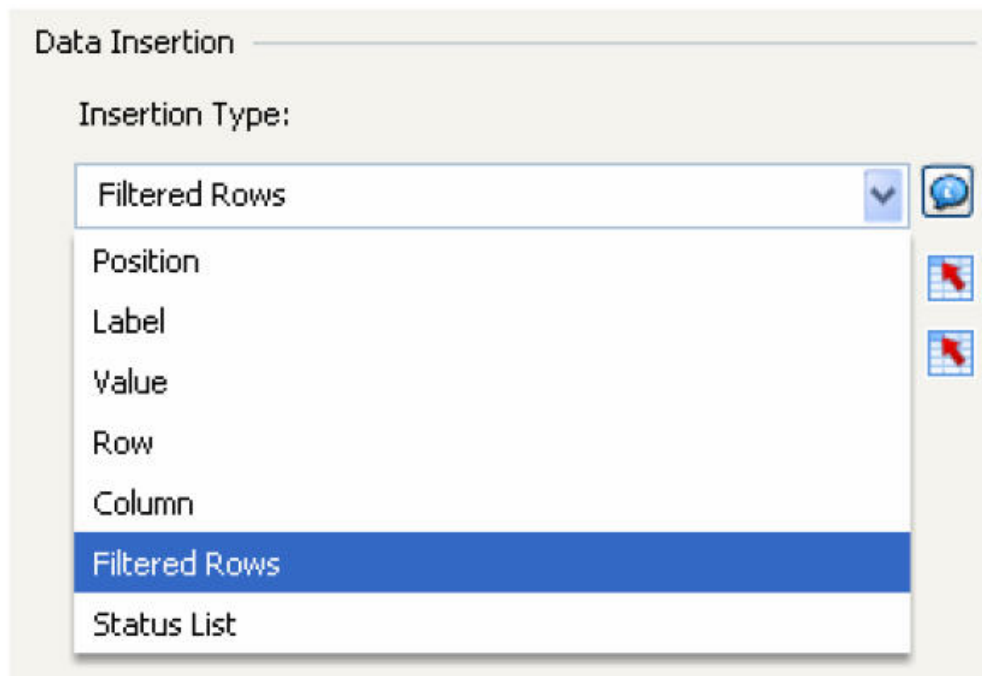
C9    =IF(C2=B2,D2,IF(C2=B3,D3,IF(C2=B4,D4,IF(C2=B5,D5,IF(C2=B6,D6,0))))))

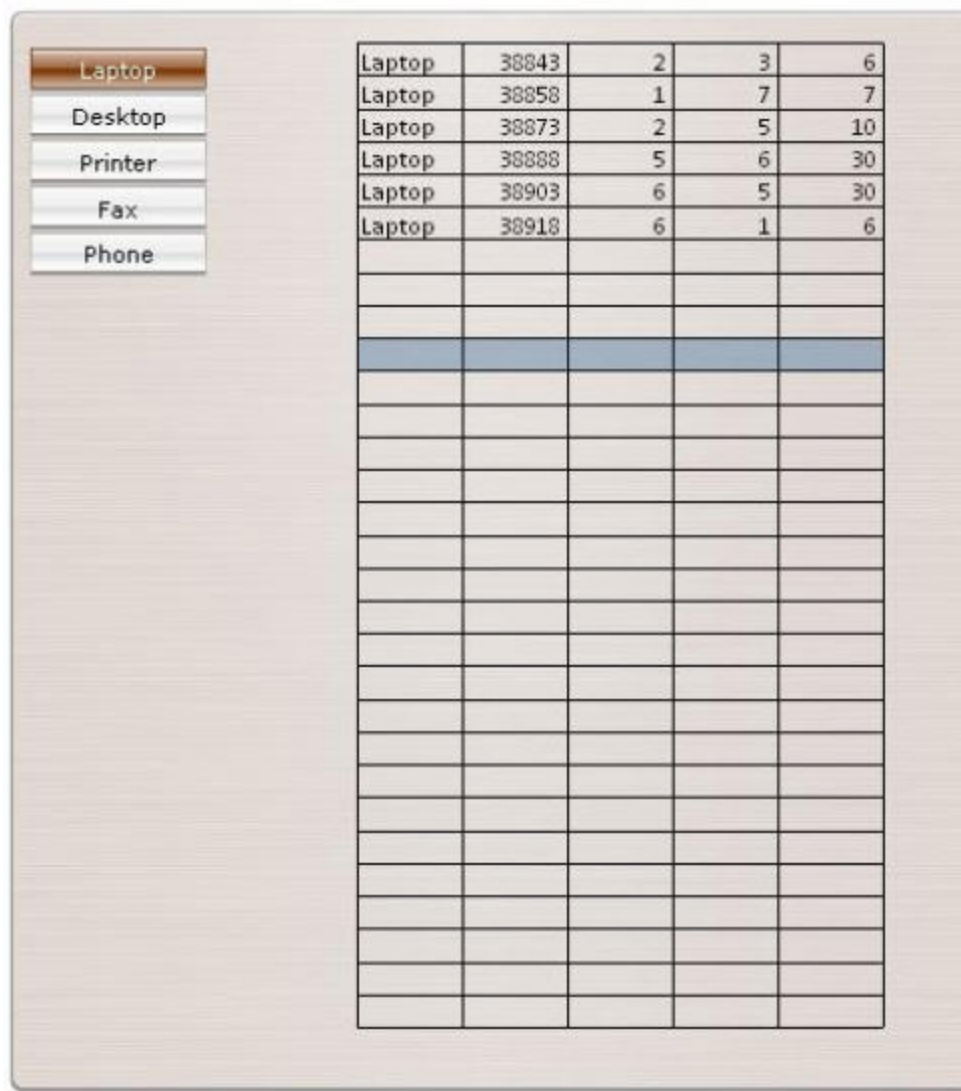
A	B	C	D	E	F	G	H
		Selected Criteria	Baseline Date				
Selection Criteria	MTD	Past 30 Days	6/1/2007	1 Month	-365	365	
	QTD		1/1/2004	3 Months			
	YTD		1/1/1989	12 Months			
	Past 30 Days		12/22/2008	1 Day			
	Past 90 Days		10/23/2008	1 Day			
	From	Cal From	To	Calc_To			
Original Range	12/22/2008	12/22/2008	10/6/2008	1/21/2009			
Daily/Monthly Chart	1						
Projected Chart							



## ► Organize Your Data

- Use INSERT ROW or COLUMN or FILTERED ROWS instead of Match and Index functions in Excel
- **Alleviates the need for complex lookup logic**





# Still Too Many Formulas?

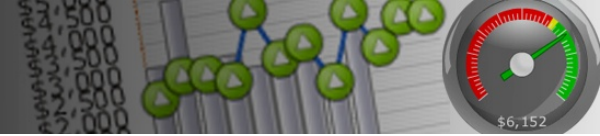


- Consider an XML Data Source Cache like **InfoBurst XDS!!!**

	base URL	<a href="http://ServerName/InfoBurst/services/getXDS.aspx?lc=SALES">http://ServerName/InfoBurst/services/getXDS.aspx?lc=SALES</a>						
	do a lookup in this range:	&f=[@OutsideSales_PC						
	with this criteria:	Period= Jan 09						
	For thisRegion:	Region=						
	(no parameters, so show all objects)							
	Completed URL link:	<a href="http://ServerName/InfoBurst/services/getXDS.aspx?lc=SALES&amp;f=[@OutsideSales_PC Per">http://ServerName/InfoBurst/services/getXDS.aspx?lc=SALES&amp;f=[@OutsideSales_PC Per</a>						
	FishEye Selection:	Region 1						
		Outside Sales						
		Region 1 Jan 09						
		Period	Region	Category	Act	Bgt	Fcst	PY
	(Totals)	Jan 09	Region 1	TOTAL	0.0	67.9	25.0	39.8
	1	Jan 09	Region 1	AMC	0.0	14.4	3.0	2.1
	2	Jan 09	Region 1	CAM	0.0	25.0	17.3	19.5
	3	Jan 09	Region 1	DI ACCY	0.0	6.5	2.7	5.9
	4	Jan 09	Region 1	DSC	0.0	22.0	2.0	12.2
	5							

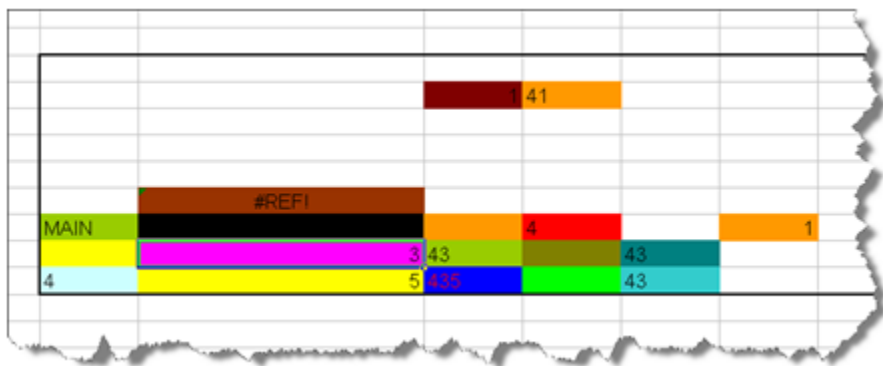


## Best Practice Tip #5

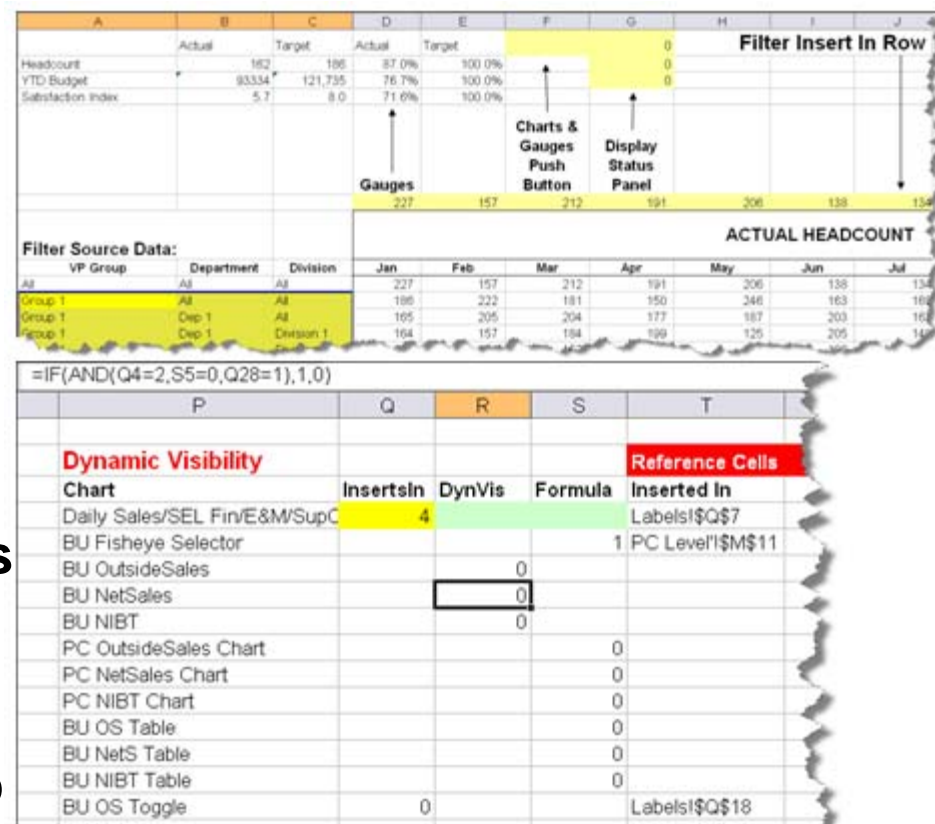


# Create a Labeling System

- **Good Labeling**



- ▶ **Color Code with Consistent Colors**
- ▶ **Create Legend Tab**
- ▶ **Title and Label cells**
- ▶ **Group Like Elements - Labels Tab**



# Develop Consistency

- ▶ Develop a Labeling Norm within your organization

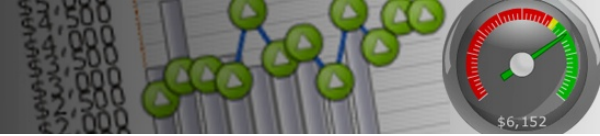
- ▶ For example:

- Destination Cells = **Yellow**
- Calculation Cells = **Pink**
- External Data Cells = **Green**
- Labels = **Red Text**

USING FOR RIGHT CHARTS					USING FOR BOTTOM LEFT CHART				
Region Selected	All Region	1			Period Selected	Month			
	MATCH								
Region					Period	Period Dig	Min Period		
1 All Regions					Month	7	2007-10		
2 North					Day	10	2008-03-23		
3 South									
4 East									
5 West									
DATA FOR BOTTOM RIGHT CHARTS									
	2007-10	2007-11	2007-12	2008-1		2008-2	2008-3		
	145	146	230		163	177	206		
	141	144	242		152	181	144		
	61	58	95		53	103	64		
	37	18	83		52	54	40		
	45	46	49		72	84	74		
	6	19	27		24	24	24		
	31	20	54		22	30	24		
	4	6	13		4	10	2		
	7	16	19		2	12	6		
	4	1	2		16	10	8		
	38	37	81		56	56	62		
	40	50	70		52	54	32		
SOURCE FOR BOTTOM SELECTOR									
DESTINATION FOR REGION SELECTOR ON TOP RIGHT									
Labels	3/23/2008	3/24/2008			3/25/2008	3/26/2008	3/27/2008	3/28/2008	3/29/2008
All Region Bin	0-19				145	146	230	163	177
All Region Bin	20-39				141	144	242	152	181
All Region Bin	40-59				61	58	95	53	103
All Region Bin	60-79				37	18	83	52	54
All Region Bin	80-99				45	46	49	72	84
All Region Bin	100-119				6	19	27	24	24
All Region Bin	120-139				31	20	54	22	30
All Region Bin	140-159				4	6	13	4	10
All Region Bin	160-179				7	16	19	2	12
All Region Bin	180-199				4	1	2	16	10
All Region Bin	200-219				38	37	81	56	56
All Region Bin	220-239				40	50	70	52	54



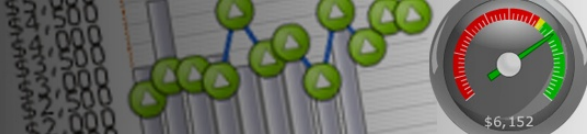
## Best Practice Tip #6



# Maximize Interactivity



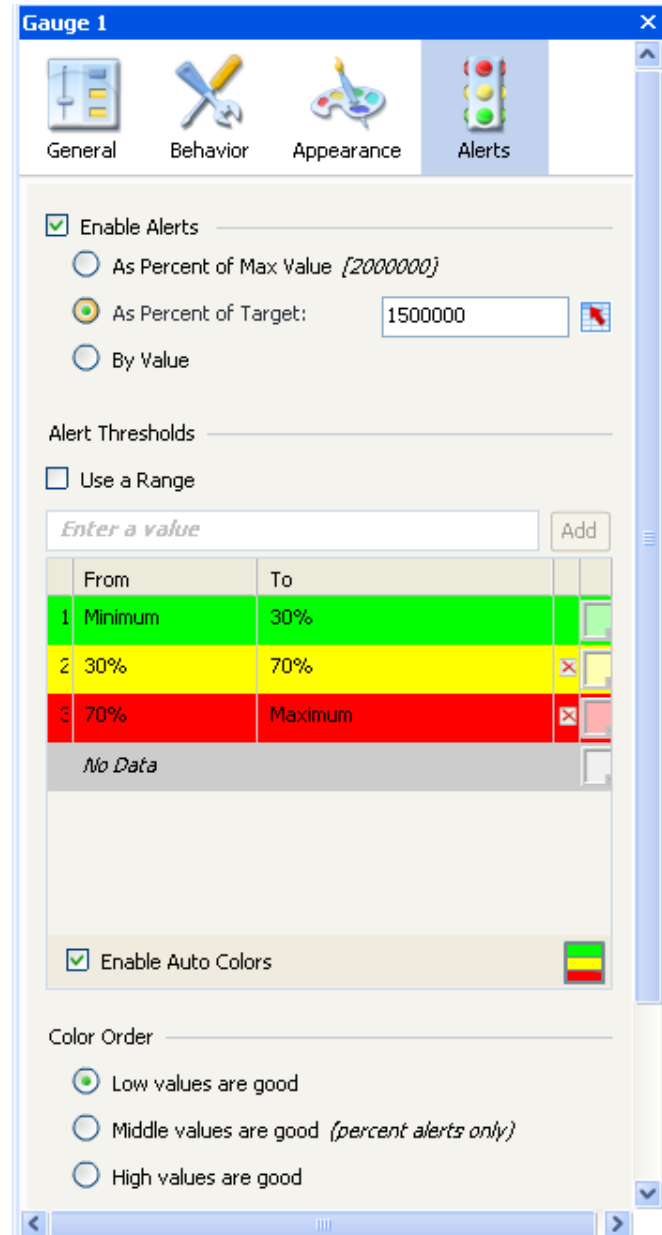
# Enhance Interactivity



## ► Core functionality of Xcelsius is Interactivity

- Selectors
- Drill Down Functionality on Charts
- Interactive Maps
- Customized Components using Images
- Drill Down to Web Intelligence or Crystal Reports Detail
- Single Value Components
- Animation
- Alerters on Charts, Maps, Single Value, Selectors
- Create Help with Toggle Button or Icon Components

- ▶ **Percent of Max Value**
- ▶ **Percent Alerts: Bindable Thresholds**
- ▶ **Improved UI**
  - Color Picker
  - Add / Remove Thresholds
  - Changing Thresholds
- ▶ **Auto Colors**
  - Gradients
- ▶ **Alerts in Selectors**








## ► Improved UI


### ■ Color Picker

Alert Thresholds

☐ Use a Range

Add

	From	To	
1	Minimum	30%	
2	30%	85%	 
3	85%	Maximum	 
No Data			

☒ Enable Auto Colors 

Color Order

☐ Low values are good

☐ Middle values are good *(percent alerts only)*

☒ High values are good

Dialog

Theme Colors

Standard Colors

More Colors

Dialog







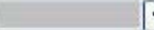

Custom

Built-in

Create new gradient...

Dialog

☐ 2-Color Gradient ☒ 3-Color Gradient

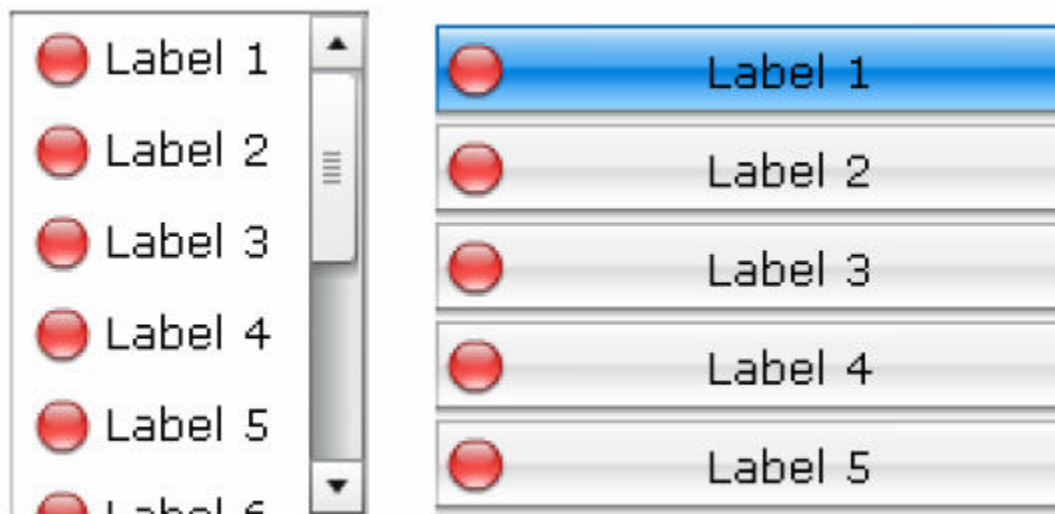
Color	Fill	Font
Color 1:	 V	 V
Color 2:	 V	 V
Color 3:	 V	 V
No Data:	 V	 V

OK Cancel

# ALERTS in Selectors



- ▶ Using the existing alert methodology, index based selectors allow for the configuration of alert icons for each label
- ▶ Ability to show icons only for applicable labels



# ALERTS in Selectors

- ▶ Use of Alerts for a scalable method for presenting alert icons to notify users where to click – providing context
- ▶ Use Alerts for tabular presentation of measures (scorecard view)

Measures	Actual	Target
 <b>Net Sales</b>	<b>\$2,159,658</b>	<b>\$1,950,000</b>
 -North	\$324,324	\$200,000
 -South	\$522,234	\$500,000
 -West	\$324,543	\$400,000
 -East	\$345,323	\$300,000
 -Northeast	\$643,234	\$550,000
 <b>Customer Satisfaction</b>	92%	90%
 <b>Marketing Spend</b>	<b>\$70,123</b>	<b>\$63,000</b>
 -Online	\$23,123	\$20,000
 -Print	\$33,000	\$30,000
 -Programs	\$14,000	\$13,000

# Custom Interactive Maps

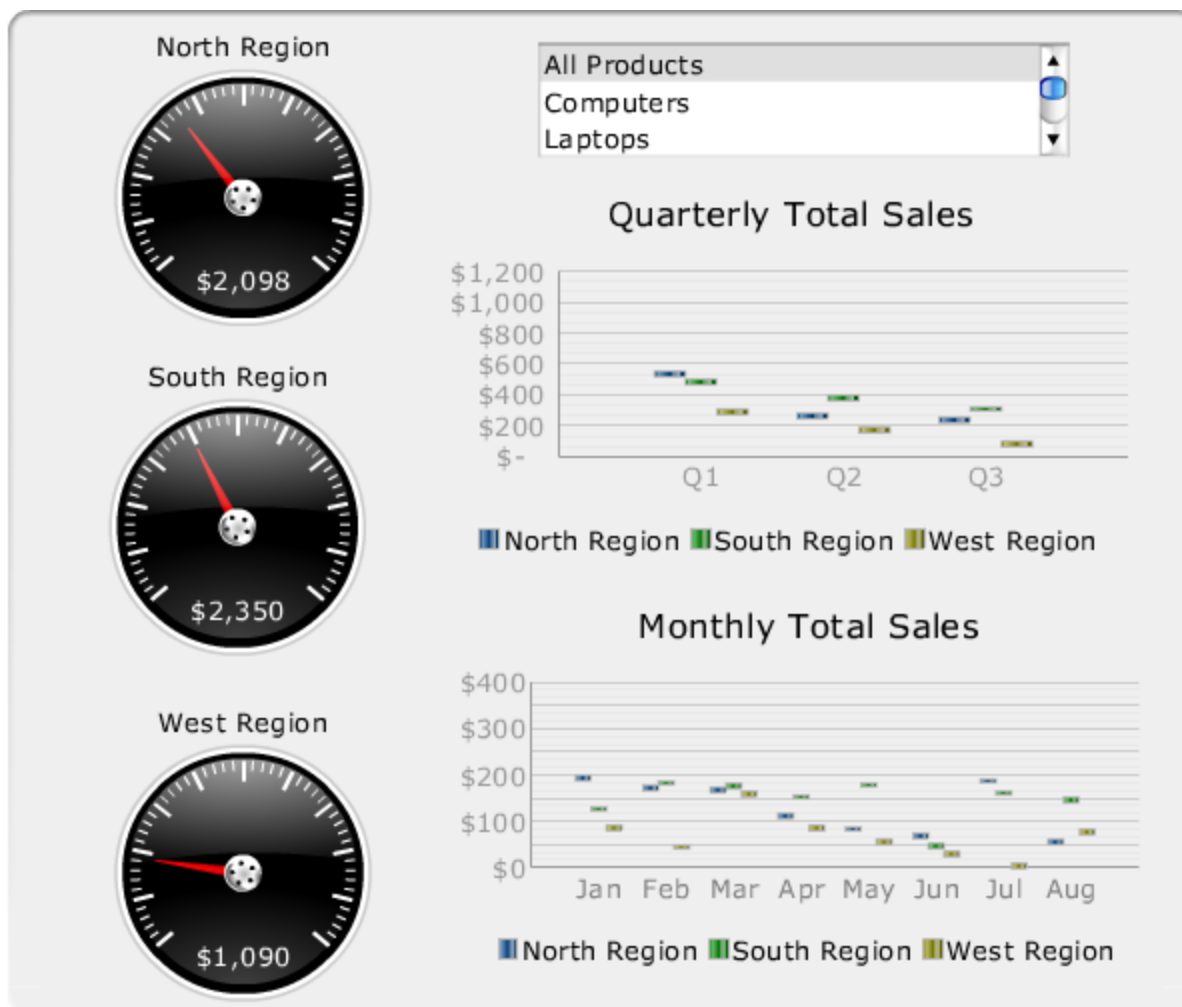


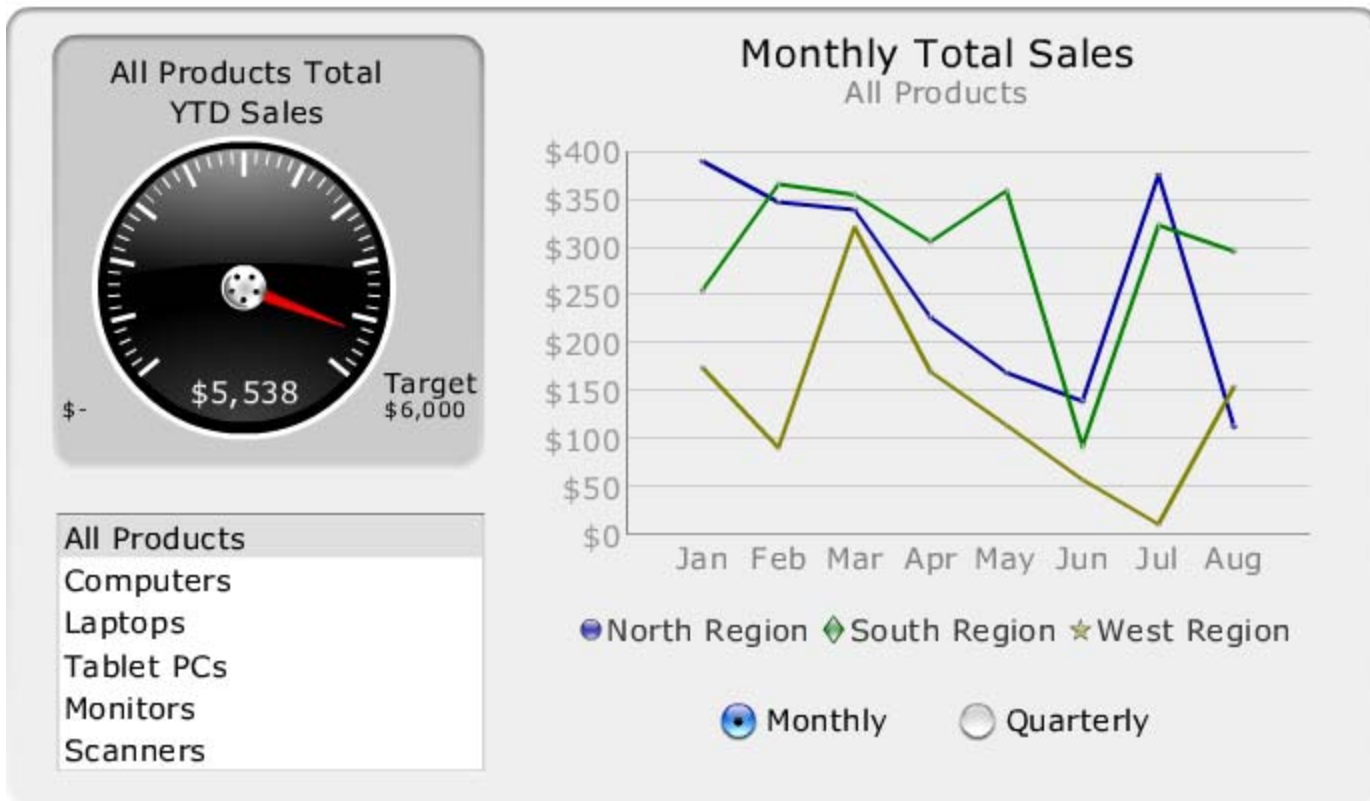


## Best Practice Tip #7



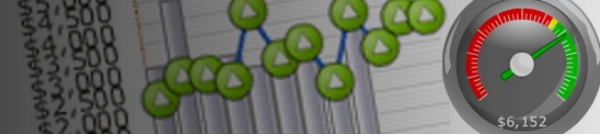
# Maximize Real Estate Using Selectors and Dynamic Visibility







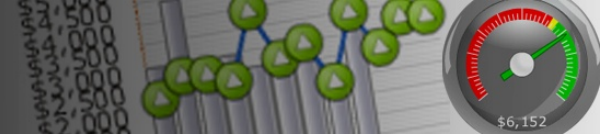
# Break It Up



- ▶ **Label Based Menu to Break Up Views**
- ▶ **Selectors to Break up busy charts**



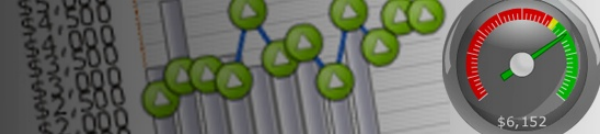
# Break It Up



- ▶ **Selectors to Break up busy charts**



## Best Practice Tip #8



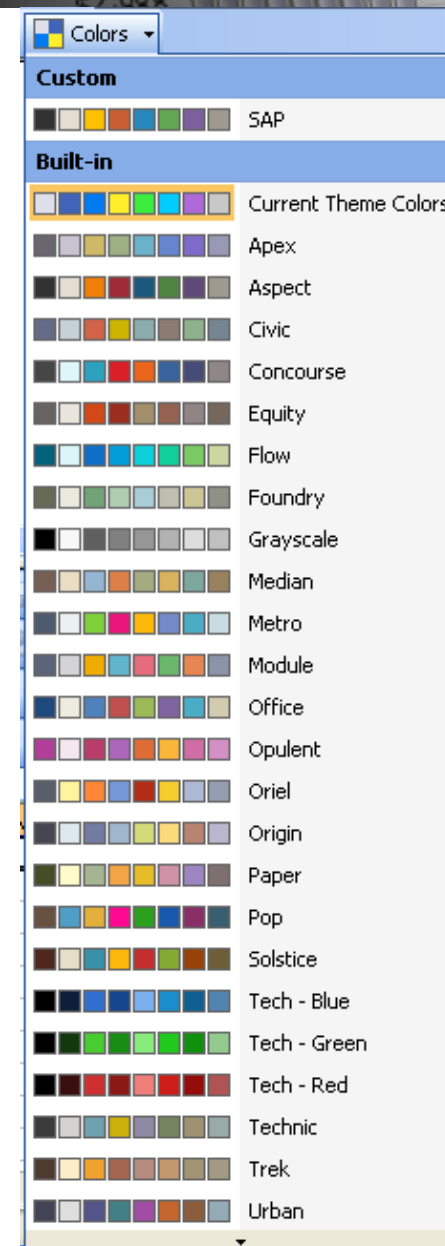
# Enhance Presentation

- ▶ A theme is a collection of object properties that change the look of your model
- ▶ Nine themes available from the Themes toolbar
- ▶ Each theme has different components

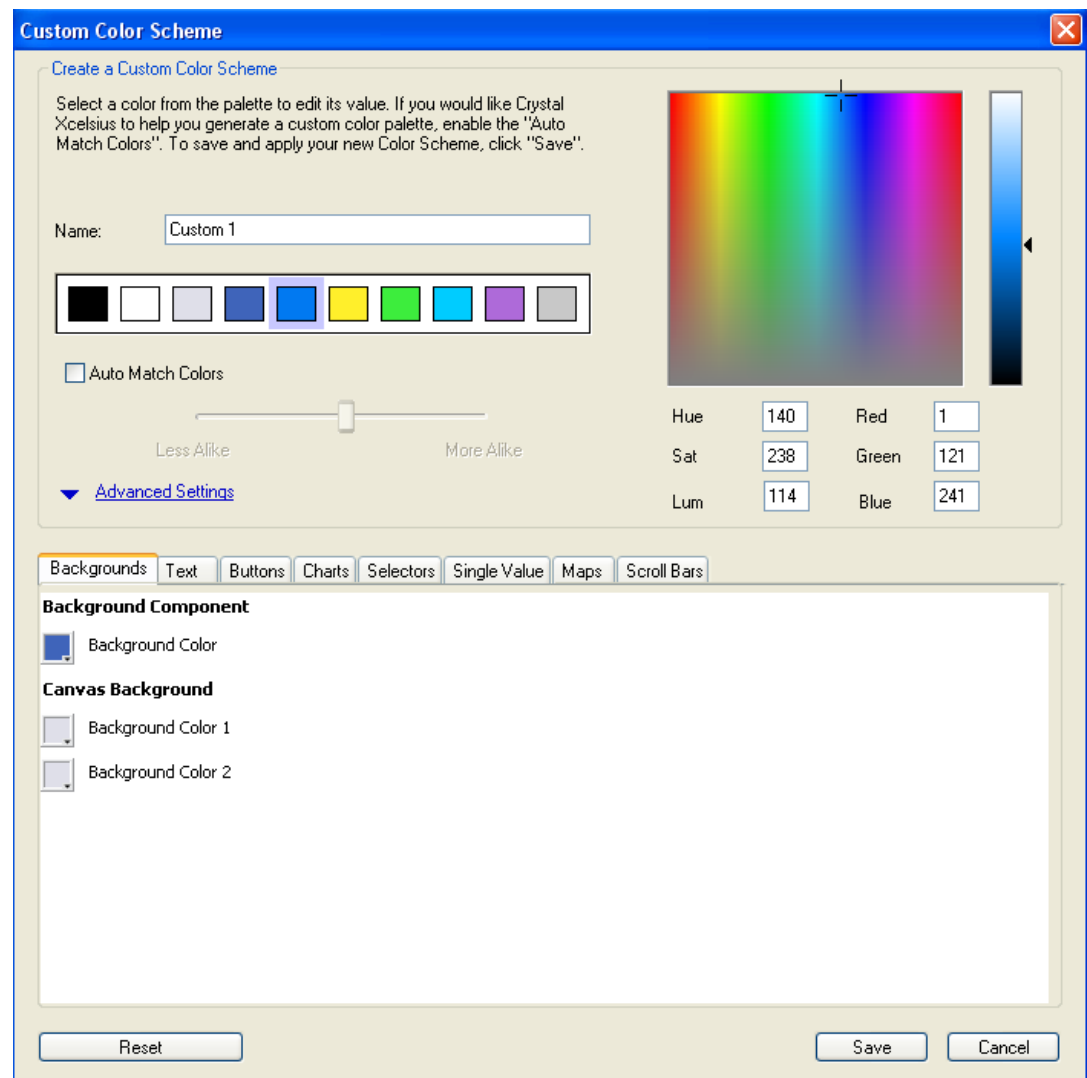
Admiral

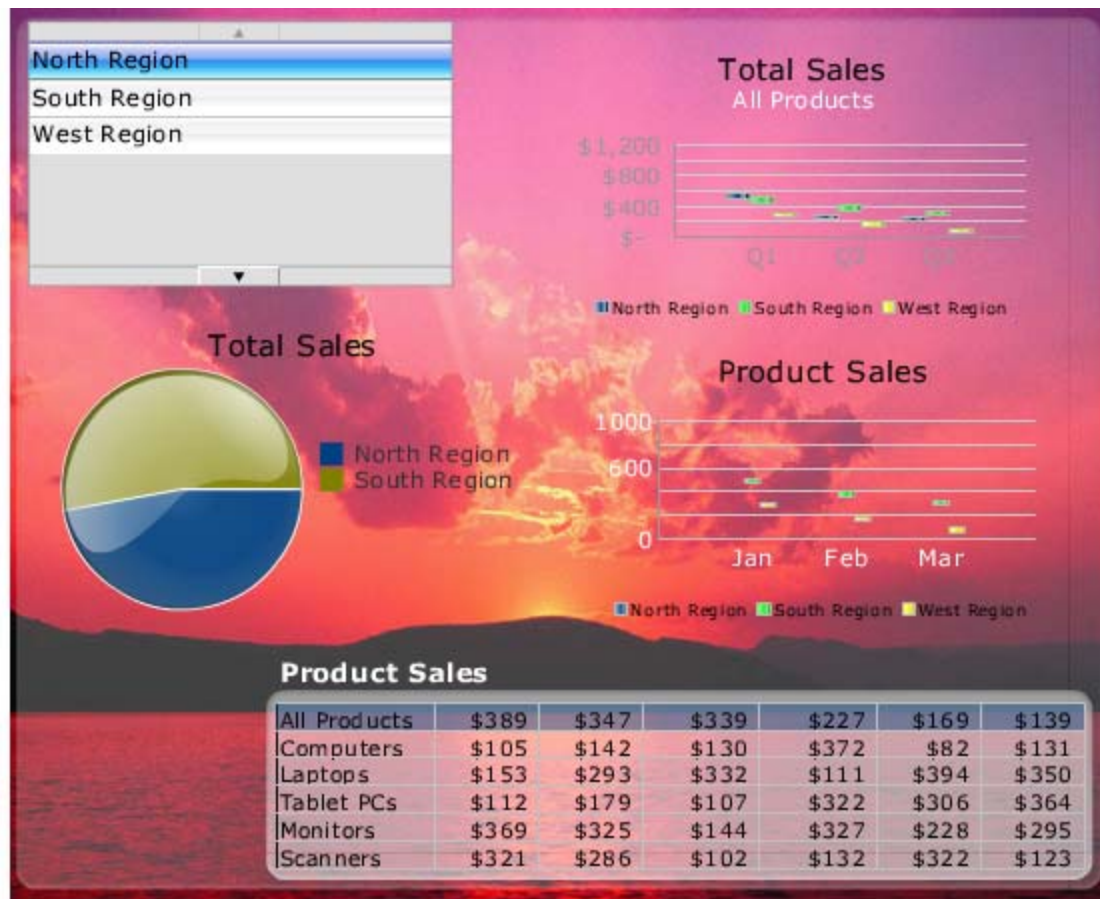


- ▶ Color schemes apply color settings for multiple objects
- ▶ Choose from a selection of built-in color schemes or create custom color schemes



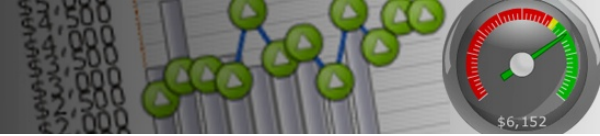
- ▶ Users can create a custom color scheme from a copy of a built-in color scheme and then edit the copy
- ▶ Advanced settings change colors for specific backgrounds, text, buttons, scroll bars, charts, single-value components, selectors and maps
- ▶ Gradient, RGB or HSL







# Charts Presentation



- ▶ **Choose Right Chart for the job**
- ▶ **Label Size for Readability**
- ▶ **Add Interactivity – Drill Down**
- ▶ **Enable Animation – if appropriate**

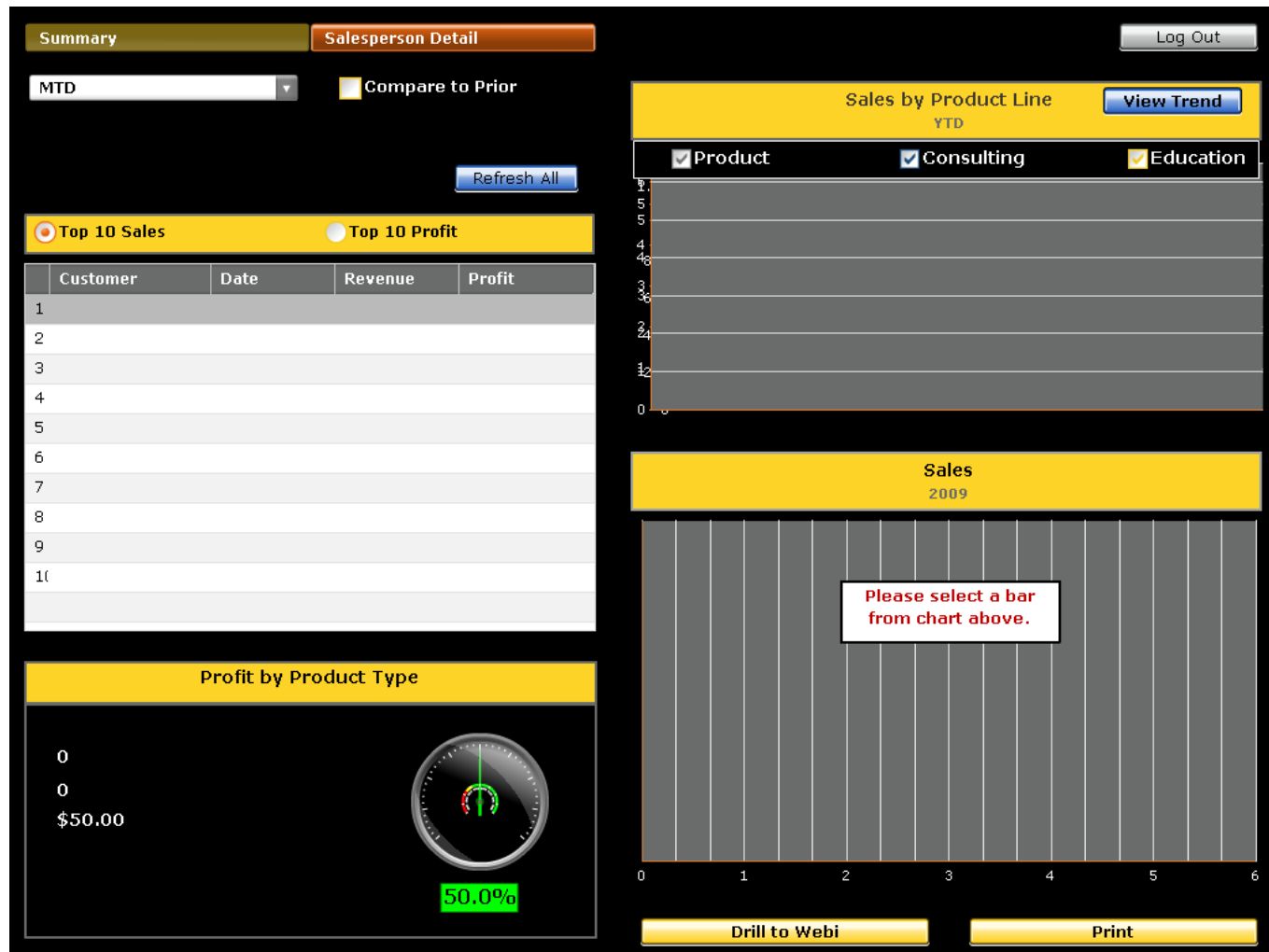


# Enhance Presentation



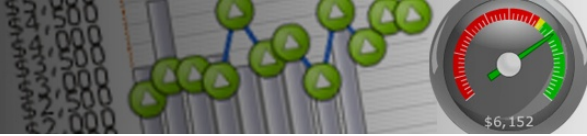
- ▶ **Tie Components to Cells rather than Hard Code**
  - Ability to make change in Excel and Utilize Formulas
- ▶ **HTML Formatting available on Text Components**
  - Ability to combine HTML formatting with dynamically generated text (from spreadsheet formulas)
    - text size, color, and messages that can quickly respond to every mouse move, click, or data value.
- ▶ **Enhance the Background**
  - Canvas Properties
  - New features for Rectangle components
    - multistage gradient and transparency control
  - New features for Image Components
    - new supported image formats
- ▶ **Include Print Button and Reset Button components**

- Use check boxes to enhance the functionality of a chart legend





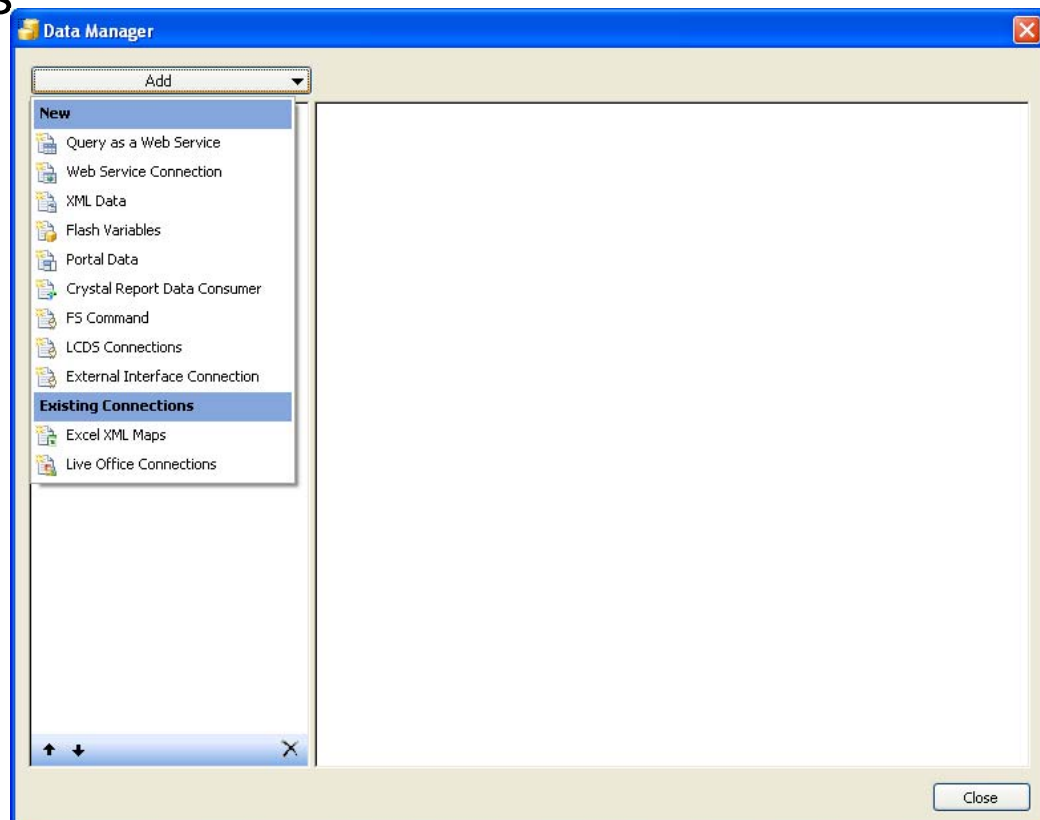
## Best Practice Tip #9



# Automate with External Data Sources

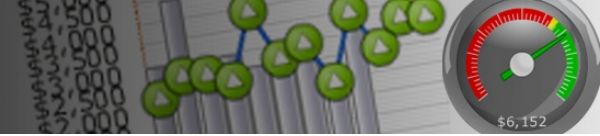
## ► Connections

- XML Data Connections
- Web Service Connections
- QAAWS
- Flash Variables Connections
- FS Command
- Crystal Report Data
- Portal Data
- XML Maps
- Live Office



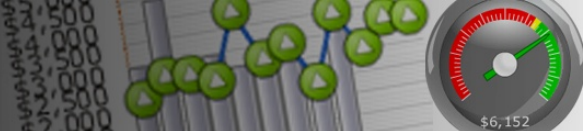










## Best Practice Tip #10



# Export to Test in Real World Environment

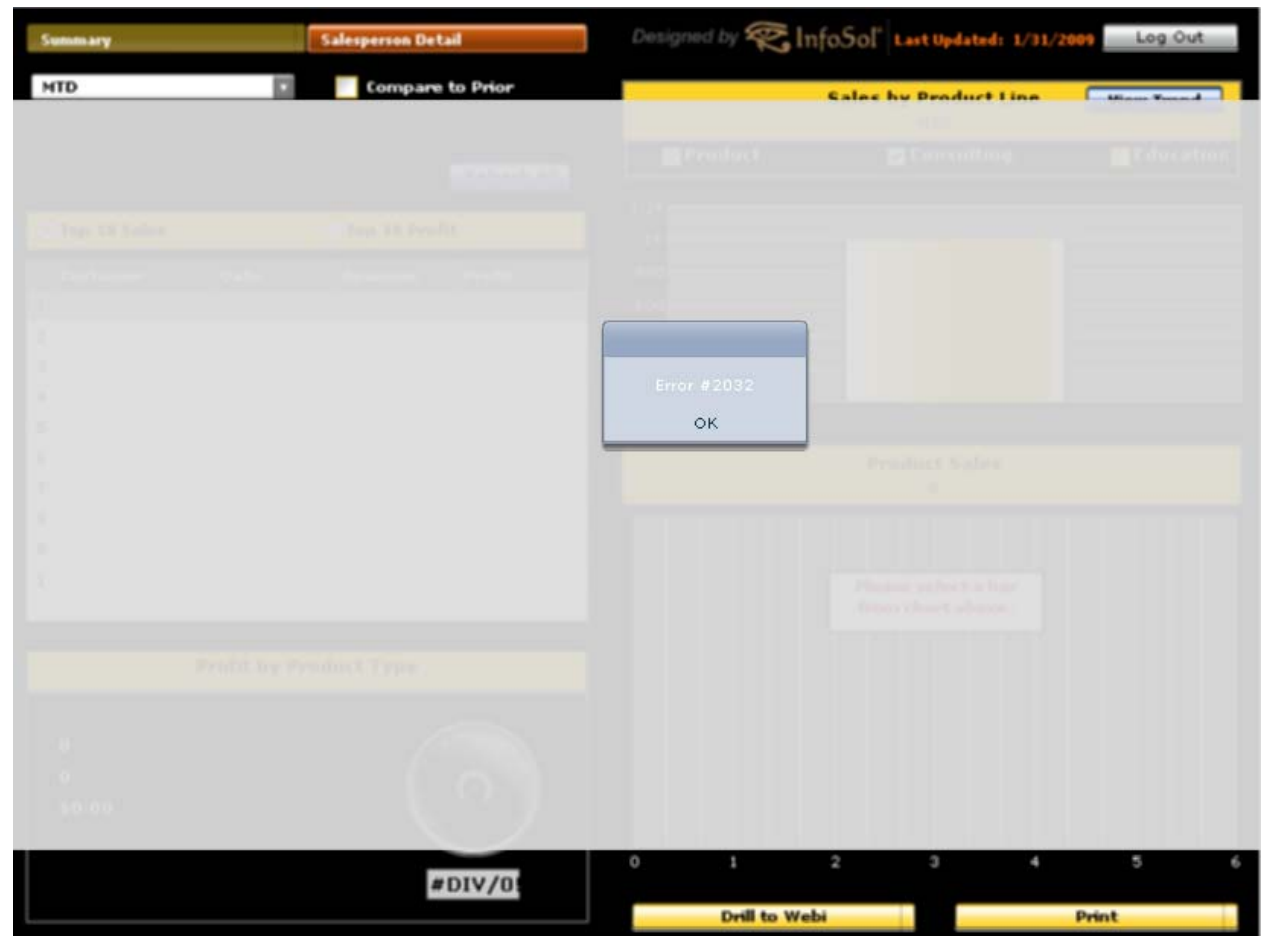
# Publishing Options



<b>Raw File</b>	<p>SWF- Can be embedded into any Application that can utilize The Macromedia Flash Player.</p>	
<b>Enterprise Deployment</b>	<p>BOE MS SharePoint HTML</p>	  
<b>Desktop Deployment</b>	<p>Word Power Point PDF Email</p>	   

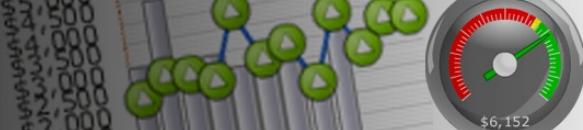
## ► Export and Test your Visualization outside of Xcelsius

- Ability to see real world view of the dashboard
- Address potential security issues
- Test connectivity





# Trust the SWF



## ► Flash Player Security

If you export to Microsoft PowerPoint, Microsoft Word, HTML, or to your desktop to run the SWF, you may find the SWF does not work if you try to retrieve data or try to navigate to a Web page because of the Adobe Flash security restrictions.

To run this SWF on your desktop, you need to make it trusted, so it can access Web sites or local data.

*Note: You can make a SWF trusted using the Global Settings Manager (if you have Internet access) or with a FlashPlayerTrust configuration file.*



# Trust the SWF



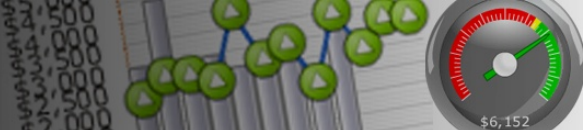
## ► Flash Player Security

**To make a SWF trusted using the Global Settings Manager:**

1. Run the SWF.
2. Right-click on the SWF to see a context menu and select Settings...
3. Select the Privacy tab.
4. Click Advanced... (opens in a new window).
5. Select Global Security Settings Panel (in the Table of Contents).
6. Add this SWF as trusted location.
7. Close the browser and reload the SWF.



# Cross Domain Policy



- ▶ **Running a SWF hosted on a web server requires a cross domain policy file.**
  - If you host your SWF on a Web server, make sure that *any Web server you need to connect to for live data has a cross-domain policy file in the Web server root* (the location of the root folder differs for each Web server).
  - If you do not, then you may not be able to connect to the Web server to get data when you run the SWF hosted on your Web server.
  - The cross-domain policy file controls which SWFs running in which domains can access your Web server.

# Example Cross Domain Policy File



- ▶ `<?xml version="1.0"?>`
  - ▶ `<!DOCTYPE cross-domain-policy SYSTEM`
  - ▶ `"http://www.macromedia.com/xml/dtds/cross-domainpolicy.dtd">`
  - ▶ `<cross-domain-policy>`
  - ▶ `<allow-http-request-headers-from domain="*"`
  - ▶ `headers="*" secure="false" />`
  - ▶ `<allow-access-from domain="*" secure="false" />`
  - ▶ `</cross-domain-policy>`
- 
- Note: The `<allow-http-request-headers-from ... />` line in Figure 5 is a new cross-domain policy requirement for Flash Player 9 onwards.



# Top Ten Best Practice Tips



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# Setting up for Success



- ▶ Do not run Excel while using Xcelsius. If running Excel, open after opening Xcelsius.
- ▶ Run 1 instance of Xcelsius at a time. If you need to copy and paste components between Xcelsius instances do so and then close the second instance of Xcelsius.
- ▶ If Xcelsius crashes for whatever reason, open the task manager CTR + ALT + DELETE and shut down any Excel processes before re-starting Xcelsius.
- ▶ Turn Excel auto save off while working heavily inside Xcelsius. In Excel 2003, this is located in Tools>Options>Save. In Excel 2007 this is located under Excel Options.
- ▶ Shut down all Excel add-ins or any other applications that may use Excel or Office.
- ▶ Save and version your dashboards every time you make major changes. It never hurts to have extra versions sitting around.
- ▶ Save Early, Save Often!

## XCELSIUS 2008 PRODUCT COMPARISON MATRIX

Feature	Engage	Engage Server	Enterprise
XML and Web Services live data connectors	•	•	•
Connectivity to Adobe LiveCycle Data Services and Microsoft Reporting Services		•	•
Microsoft and IBM portal integrations		•	•
Flynet automatic Web service generator		•	
BusinessObjects platform connectivity and integration			•
Basic data visualization components	•	•	•
Export to Adobe PDF and Microsoft Office	•	•	•
Add-on capability	•	•	•
Dashboard creation components, export to Adobe Flash and the Web	•	•	•



**Questions?**