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# Ask the Expert

## SAS Visual Analytics: What's New in 7.4



**Presenter: Ted Stolarczyk**
Technical Advisor
SAS Customer Loyalty Team

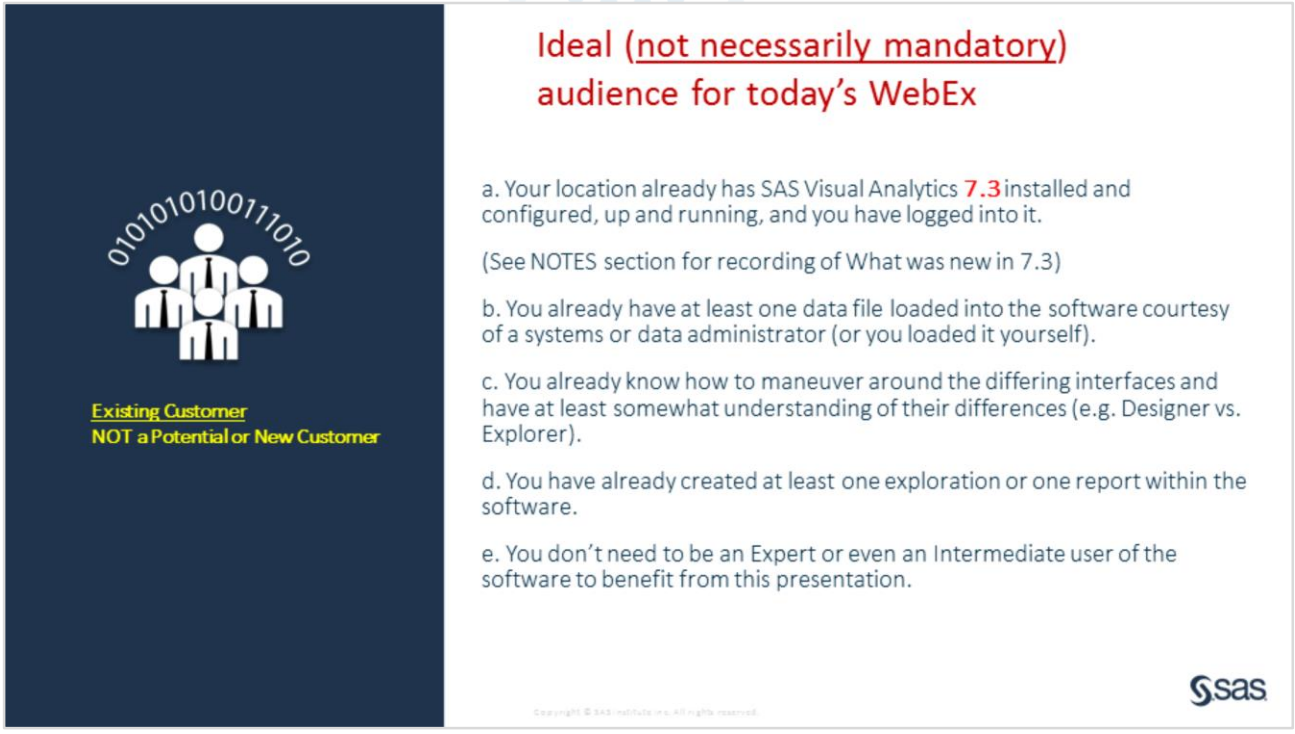


**Q&A: Shannon Moore**
Senior Systems Engineer
SAS Customer Loyalty Team

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**For those SAS Visual Analytics customers running a release that is older than v7.3:**

https://www.sas.com/en_us/webinars/visual-analytics-new/register.html


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**Most of the new and improved features is for VA Report (Modern, HTML-5) Viewer but this alone is worth the upgrade!**

**Including it should run much quicker than previous releases.**

**Previous 7.x releases mostly forced users to switch to Classic (Adobe Flash) Report Viewer instead:**

**http://support.sas.com/kb/58/945.html**

**Though note, if you are going to now utilize the Modern HTML-5 Viewer heavily, SAS recommends that you switch to using the 64-bit version of Google Chrome or Mozilla Firefox:**

**http://support.sas.com/kb/57/733.html**



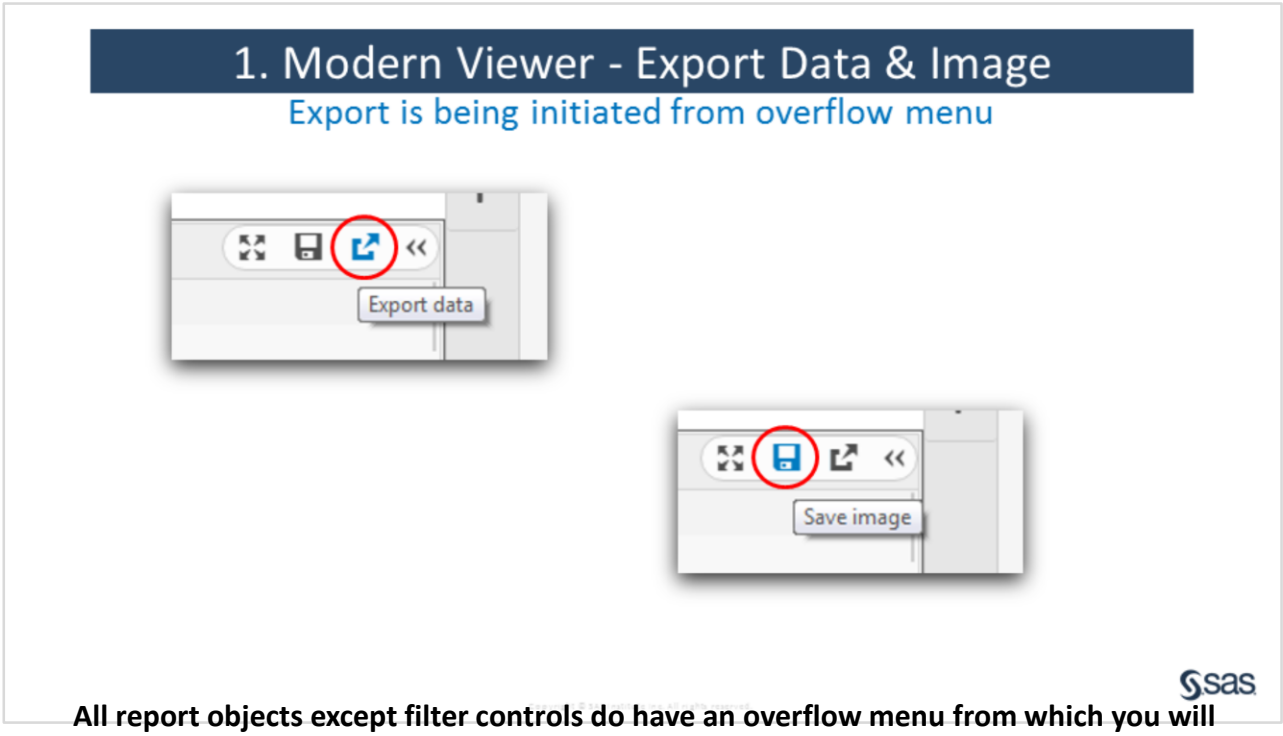
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**Full details:**

http://support.sas.com/documentation/cdl/en/vaug/69957/HTML/default/viewer.htm#vaugwhatsnew74.htm


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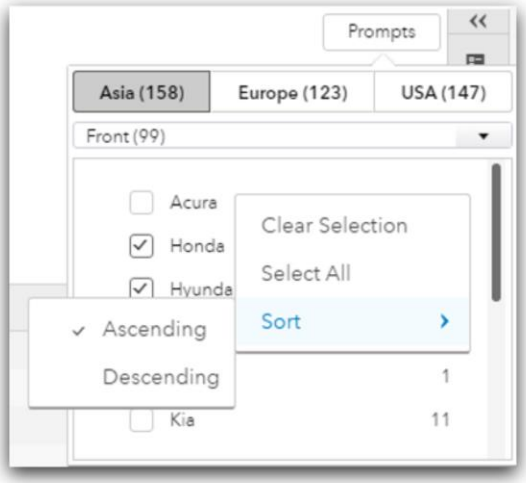



**All report objects except filter controls do have an overflow menu from which you will be able to export the data or save the object as an image file.**


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# 1. Modern Viewer - Select All /Clear Selection for List Prompt Controls

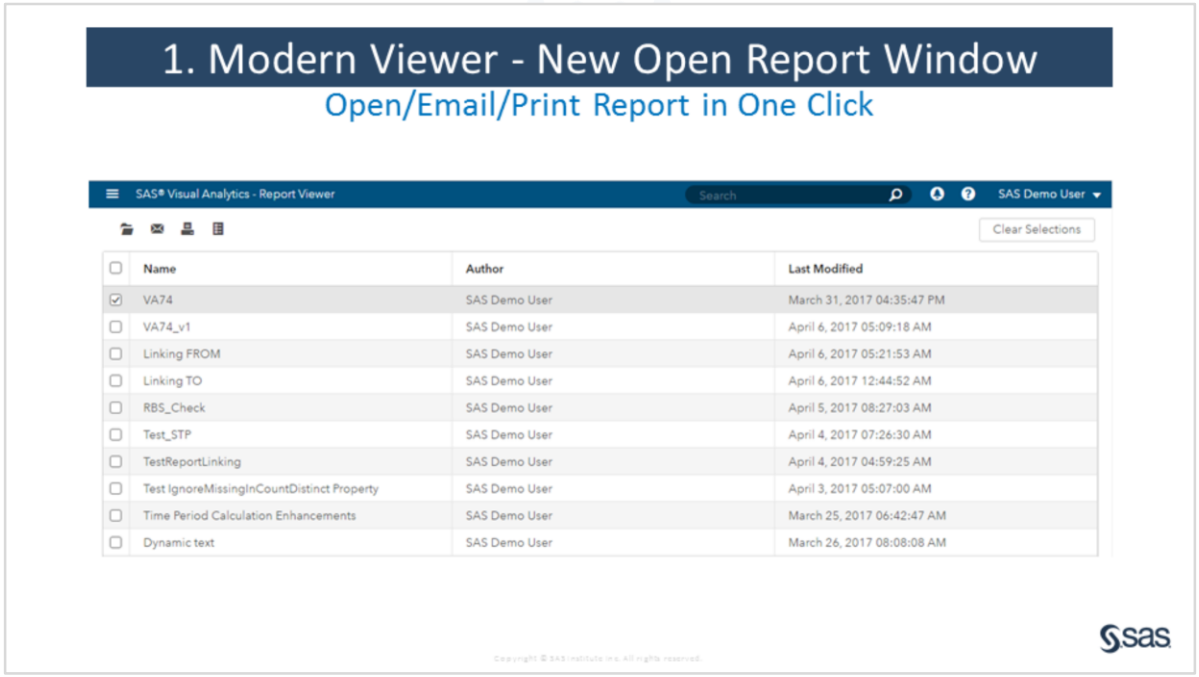
## Initiated via RMB




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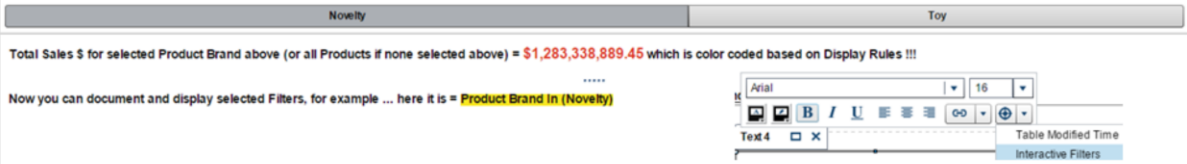



**The new Open Report Window allows you to print and email directly.**

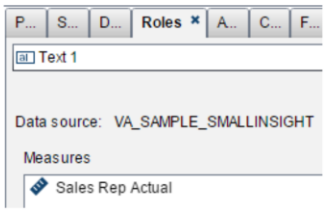

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# 2. Dynamic Text

Table Modified Time & Interactive Filter Conditions can be inserted via the format toolbar of text box …




Dynamic values for measures & parameters can be inserted via the roles pane of textbox …



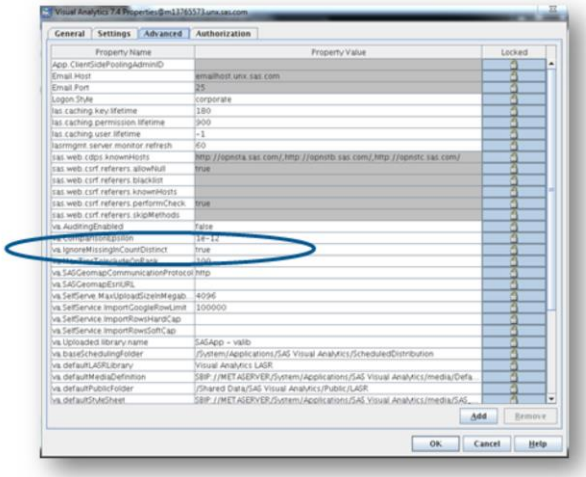



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# 3. Calculations & Aggregations – Count Distinct

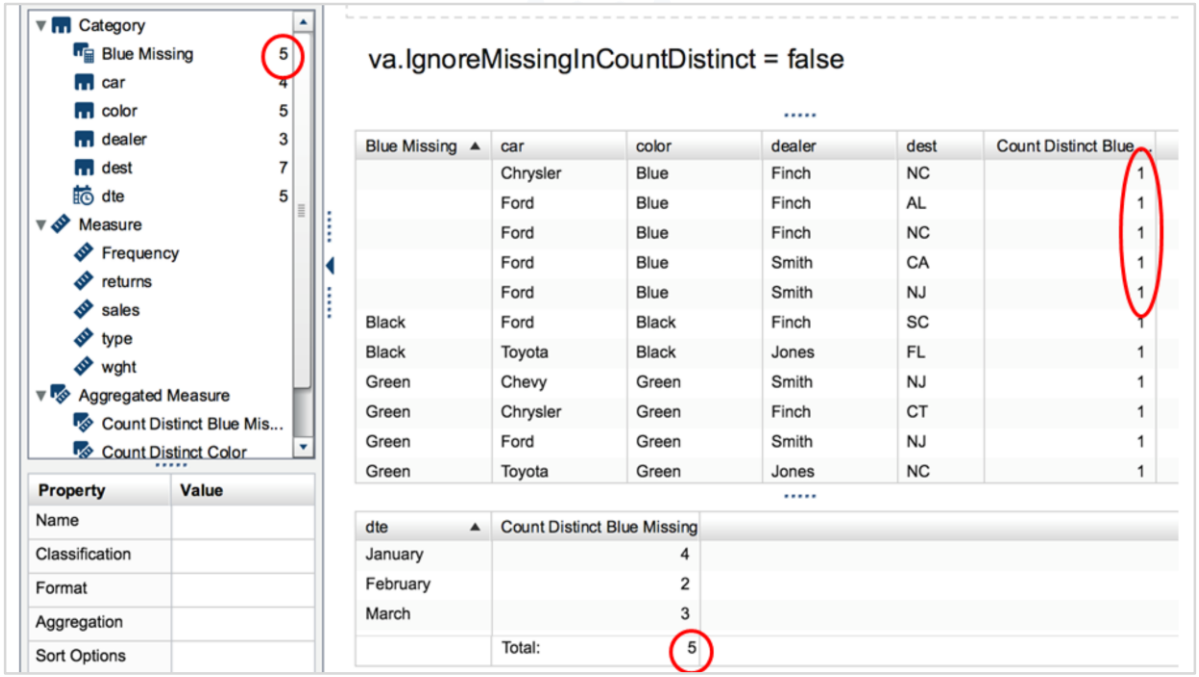
va.IgnoreMissingInCountDistinct




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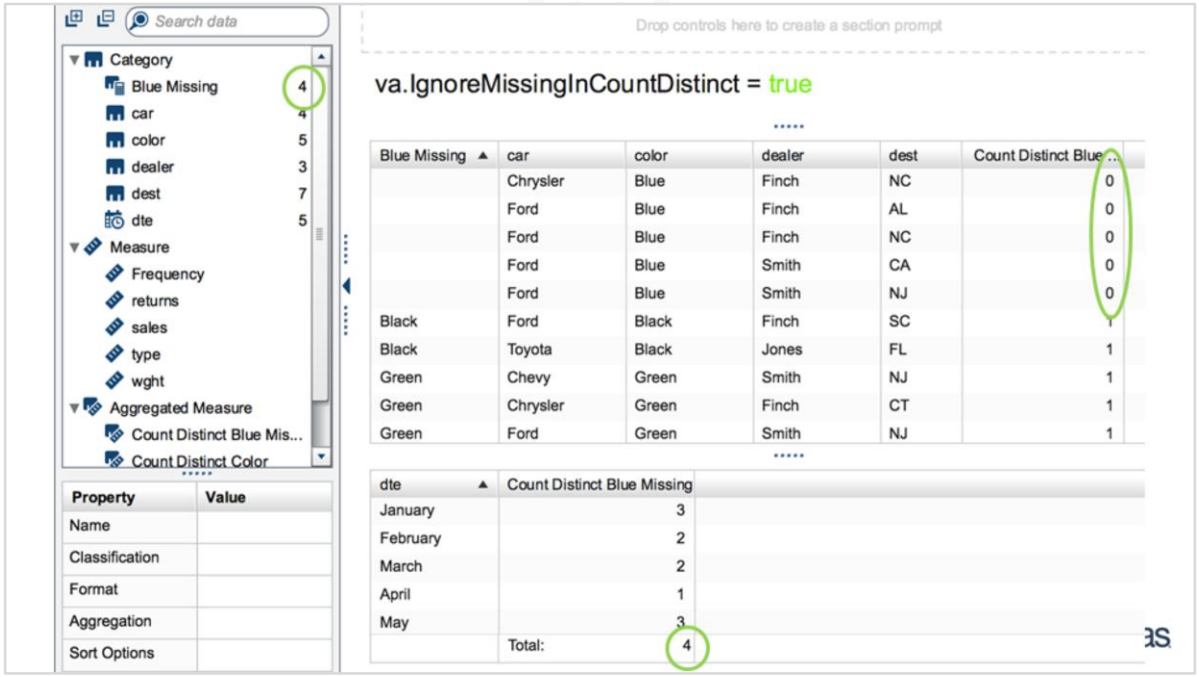
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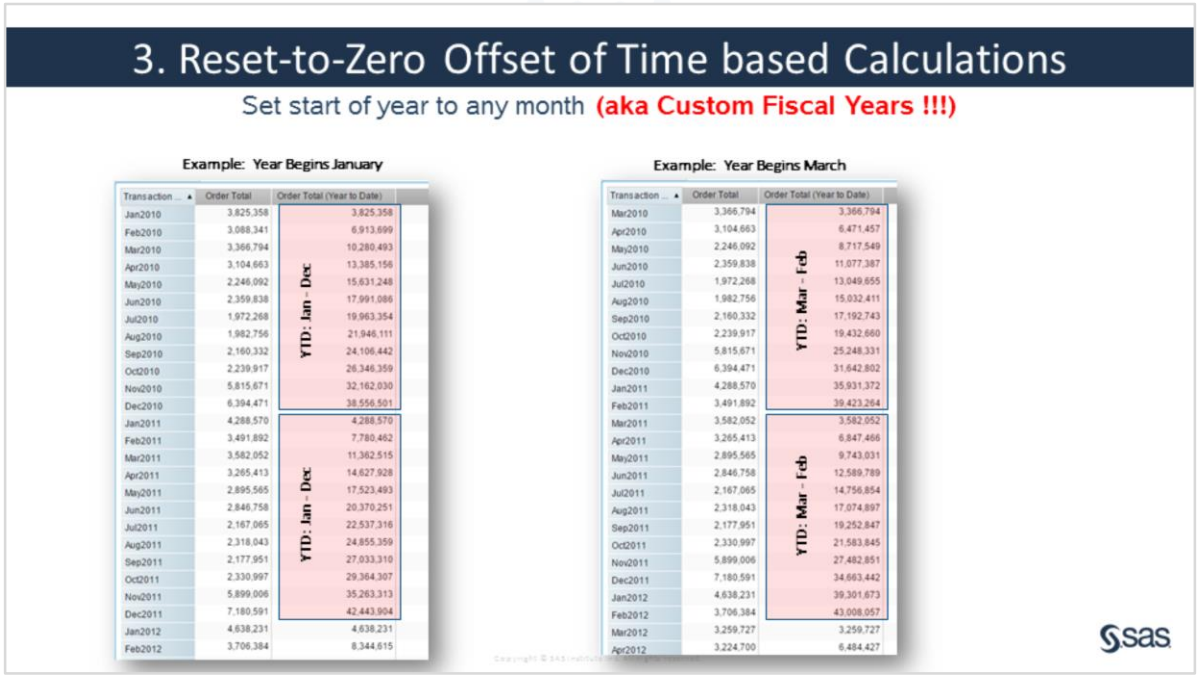

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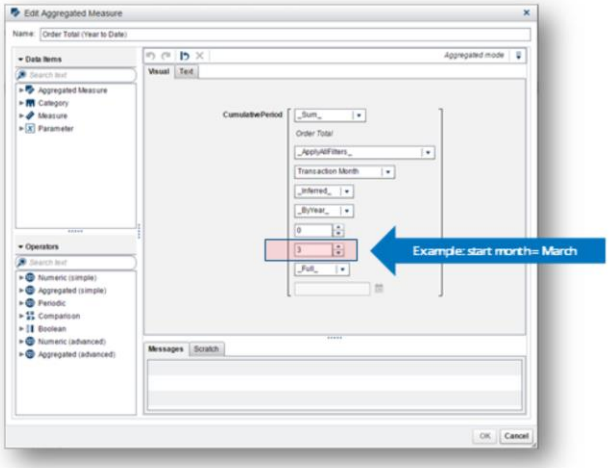



**VA software still assumes a 12 month Fiscal Year.**


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# 3. Reset-to-Zero Offset of Time based Calculations

Set start of year to any month



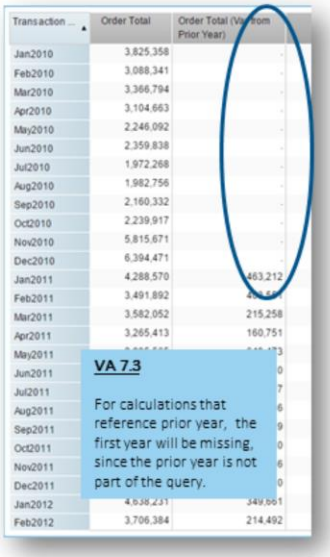

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# 3. Time Based Calculations not Restricted to Filters

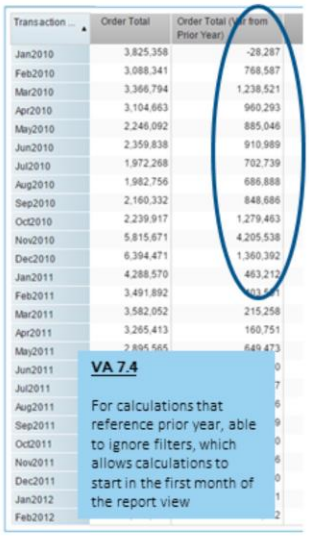
## Calculation on all data, apply filter to view



| Transaction ... | Order Total | Order Total (Var from Prior Year) |
|---|---|---|
| Jan2010 | 3,825,358 | - |
| Feb2010 | 3,088,341 | - |
| Mar2010 | 3,366,794 | - |
| Apr2010 | 3,104,663 | - |
| May2010 | 2,246,092 | - |
| Jun2010 | 2,359,838 | - |
| Jul2010 | 1,972,268 | - |
| Aug2010 | 1,982,756 | - |
| Sep2010 | 2,160,332 | - |
| Oct2010 | 2,239,917 | - |
| Nov2010 | 5,815,671 | - |
| Dec2010 | 6,394,471 | - |
| Jan2011 | 4,288,570 | 463,212 |
| Feb2011 | 3,491,892 | [illegible] |
| Mar2011 | 3,582,052 | 215,258 |
| Apr2011 | 3,265,413 | 160,751 |
| May2011 | [illegible] | [illegible] |
| Jun2011 | [illegible] | [illegible] |
| Jul2011 | [illegible] | [illegible] |
| Aug2011 | [illegible] | [illegible] |
| Sep2011 | [illegible] | [illegible] |
| Oct2011 | [illegible] | [illegible] |
| Nov2011 | [illegible] | [illegible] |
| Dec2011 | [illegible] | [illegible] |
| Jan2012 | 4,638,231 | 349,661 |
| Feb2012 | 3,706,384 | 214,492 |

**VA 7.3**

For calculations that reference prior year, the first year will be missing, since the prior year is not part of the query.



| Transaction ... | Order Total | Order Total (Var from Prior Year) |
|---|---|---|
| Jan2010 | 3,825,358 | -28,287 |
| Feb2010 | 3,088,341 | 768,587 |
| Mar2010 | 3,366,794 | 1,238,521 |
| Apr2010 | 3,104,663 | 960,293 |
| May2010 | 2,246,092 | 885,046 |
| Jun2010 | 2,359,838 | 910,989 |
| Jul2010 | 1,972,268 | 702,739 |
| Aug2010 | 1,982,756 | 686,888 |
| Sep2010 | 2,160,332 | 848,686 |
| Oct2010 | 2,239,917 | 1,279,463 |
| Nov2010 | 5,815,671 | 4,205,538 |
| Dec2010 | 6,394,471 | 1,360,392 |
| Jan2011 | 4,288,570 | 463,212 |
| Feb2011 | 3,491,892 | [illegible] |
| Mar2011 | 3,582,052 | 215,258 |
| Apr2011 | 3,265,413 | 160,751 |
| May2011 | 2,895,565 | 649,473 |
| Jun2011 | [illegible] | [illegible] |
| Jul2011 | [illegible] | [illegible] |
| Aug2011 | [illegible] | [illegible] |
| Sep2011 | [illegible] | [illegible] |
| Oct2011 | [illegible] | [illegible] |
| Nov2011 | [illegible] | [illegible] |
| Dec2011 | [illegible] | [illegible] |
| Jan2012 | [illegible] | [illegible] |
| Feb2012 | [illegible] | [illegible] |

**VA 7.4**

For calculations that reference prior year, able to ignore filters, which allows calculations to start in the first month of the report view

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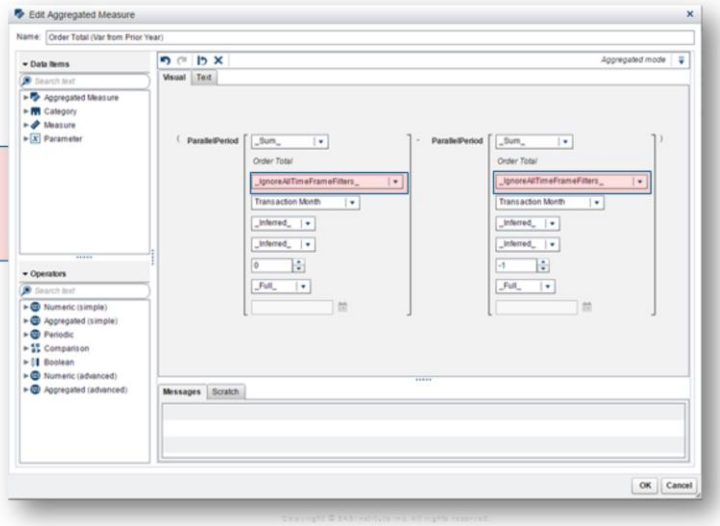
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# 3. Time Based Calculations not Restricted to Filters

Calculation on all data, apply filter to view

**Can choose to ignore:**

- Apply all filters
- **ALL** time frame filters
  - OR -
- **Interactive** time frame filters



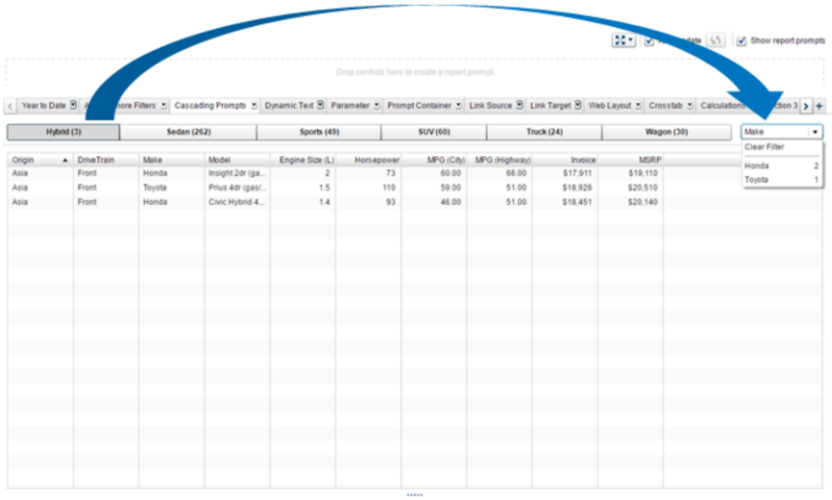





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# 4. Cascading Prompts

Now available in report and section level prompts




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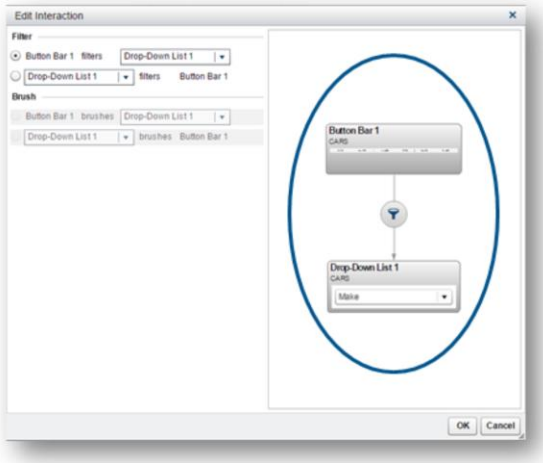


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# 4. Cascading Prompts

***New > Interaction*** now available for section and report level prompts



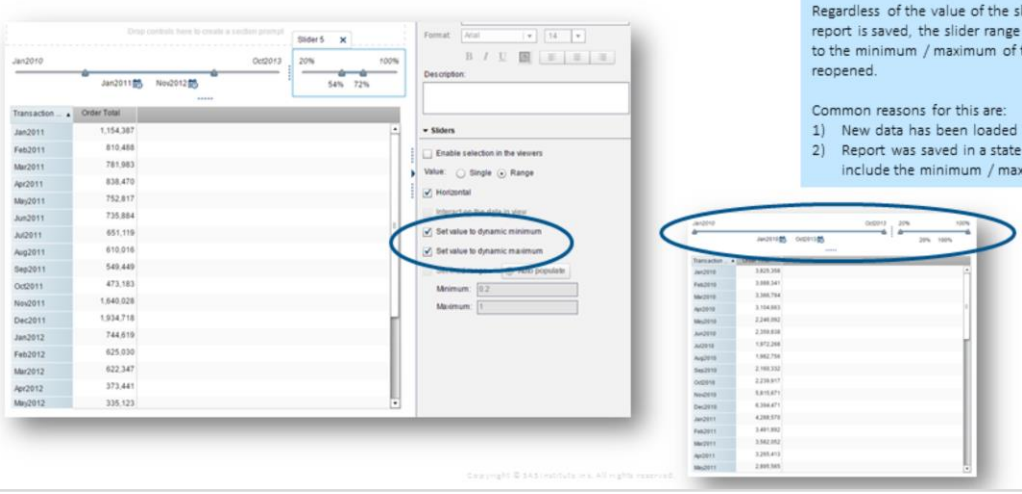

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# 4. Dynamic Values for Slider Controls

Automatically adjust minimum/maximum to current data query






**Slider Control Dynamic Minimum / Maximum:**

Regardless of the value of the slider when a report is saved, the slider range will expand to the minimum / maximum of the data when reopened.

Common reasons for this are:

1) New data has been loaded
2) Report was saved in a state that did not include the minimum / maximum

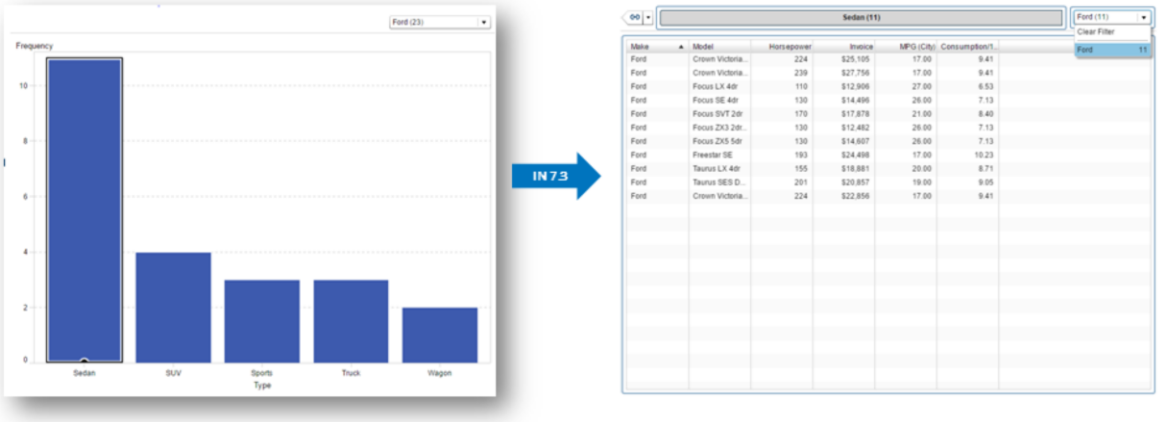
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# 4. Page Linking

More control on source



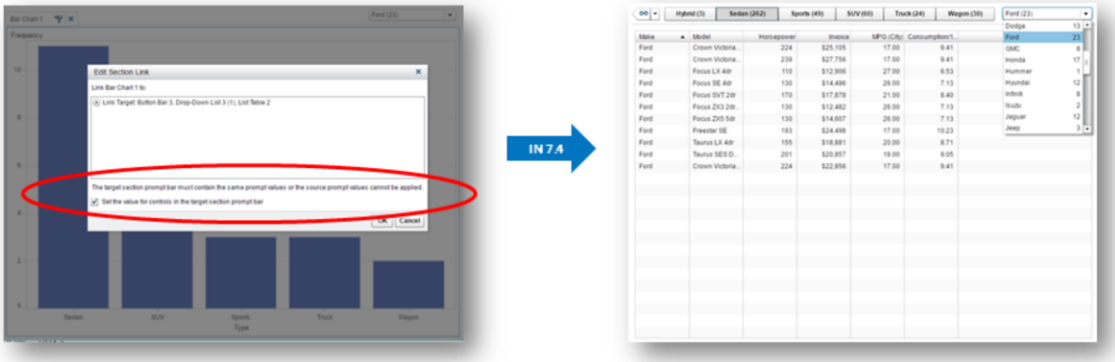

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# 4. Page Linking

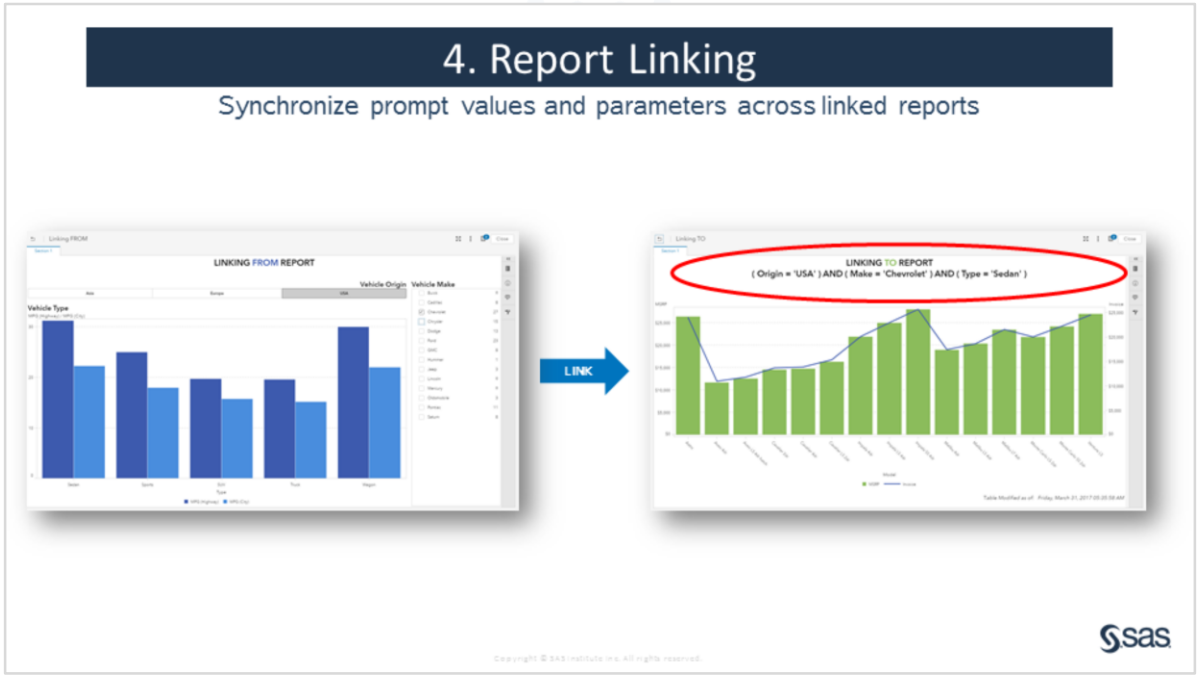
More control on source




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**Though there appears to be some issue with Section prompts and Drop-down lists with this new feature.**

**SAS Tech Support is currently investigating.**


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# 4. Other enhancements to parameters

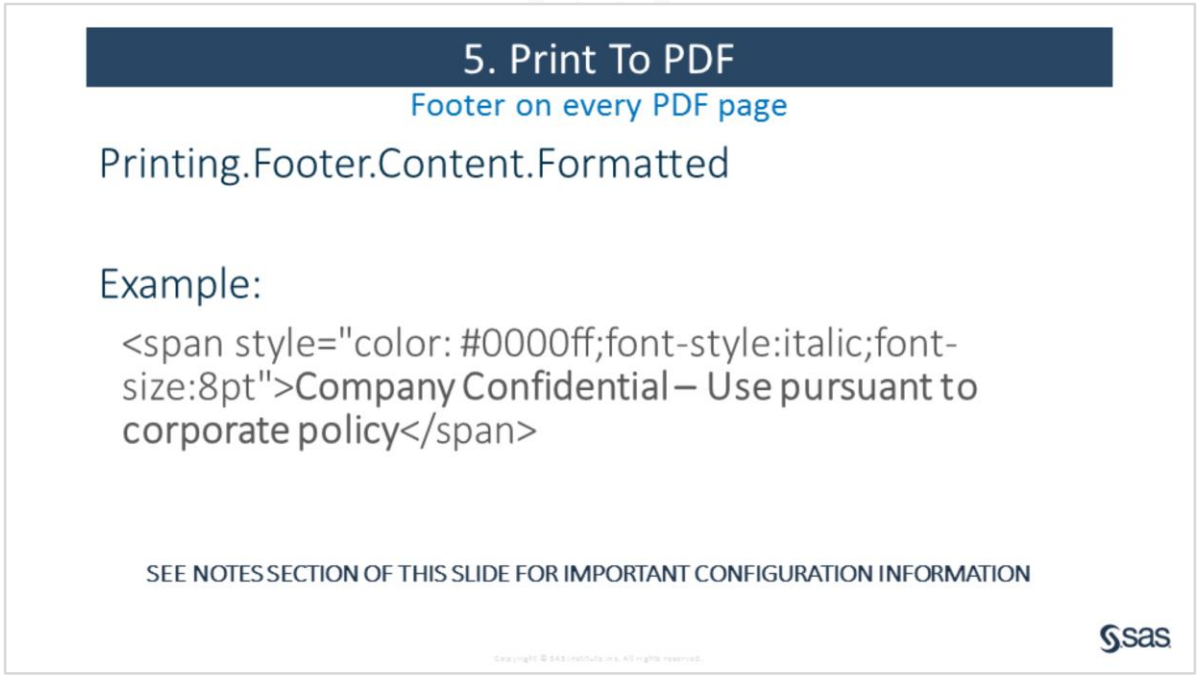
## Parameters with multiple values and parameters based on dates








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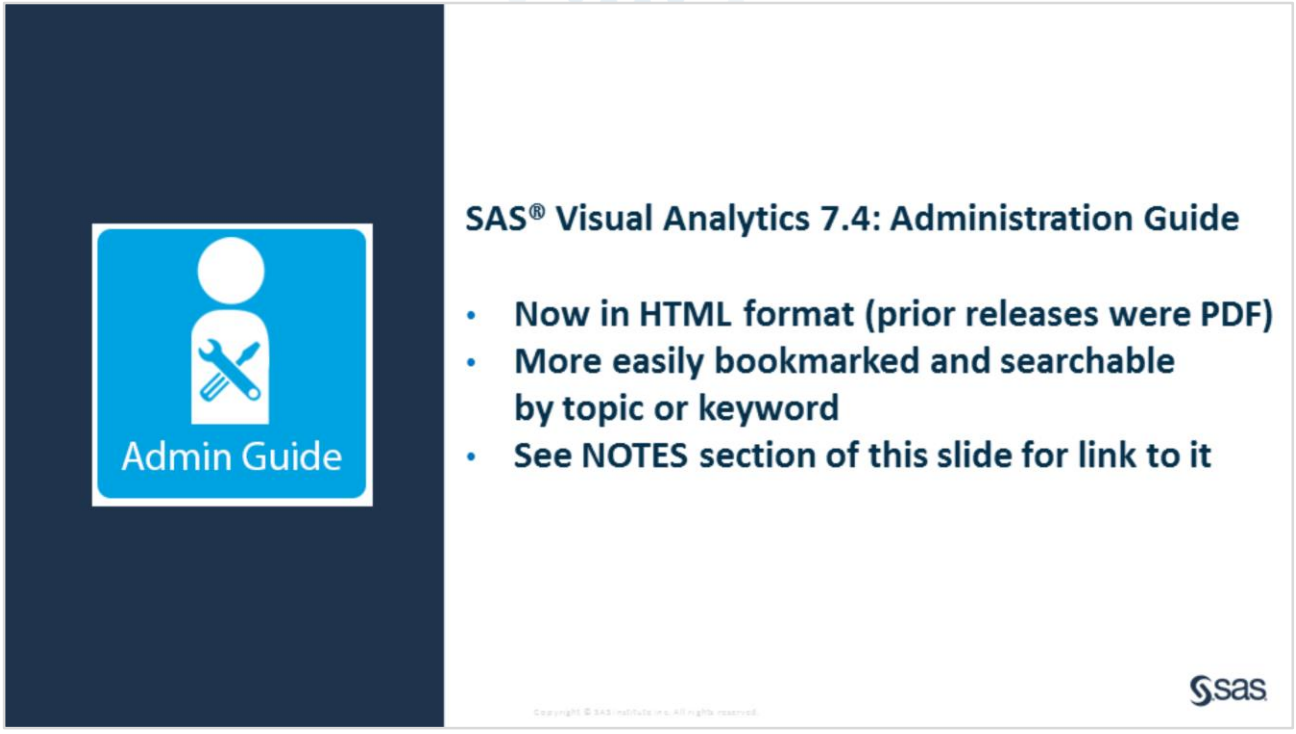

**From the VA 7.4 Admin Guide:**

**http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#n1cn4z8a0cak9pn18tikpiil1u02.htm**

**You need to re-start Object Spawner and Web Application Server eventhough it's not mentioned in documentation to do so.**

**And remember, the act of re-starting Object Spawner and Web Application Server may require you to re-start LASR and corresponding In-Memory data files if your instance is not set-up for automatic re-load.**


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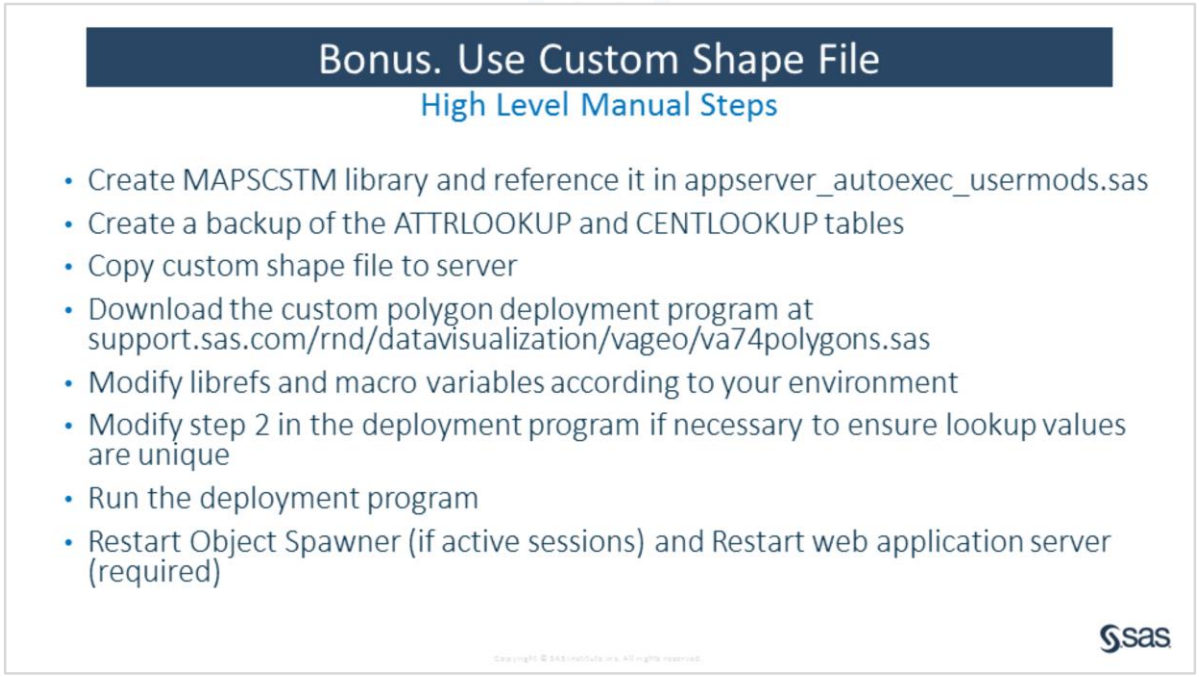



**Direct link to VA 7.4 Admin Guide:**

http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#n17ccsfc5py3m8n16bunb81n3ud8.htm

**Note … 7.3 Admins can take advantage of this new format doc and info as well with the exception of new Admin features specific to 7.4**


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**From the VA 7.4 Admin Guide:**

**http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#n0g5kjtnbvsrwbn1lxl2wahyc5du.htm**

**Remember, the act of re-starting Object Spawner and Web Application Server may require you to re-start LASR and corresponding In-Memory data files if your instance is not set-up for automatic re-load.**

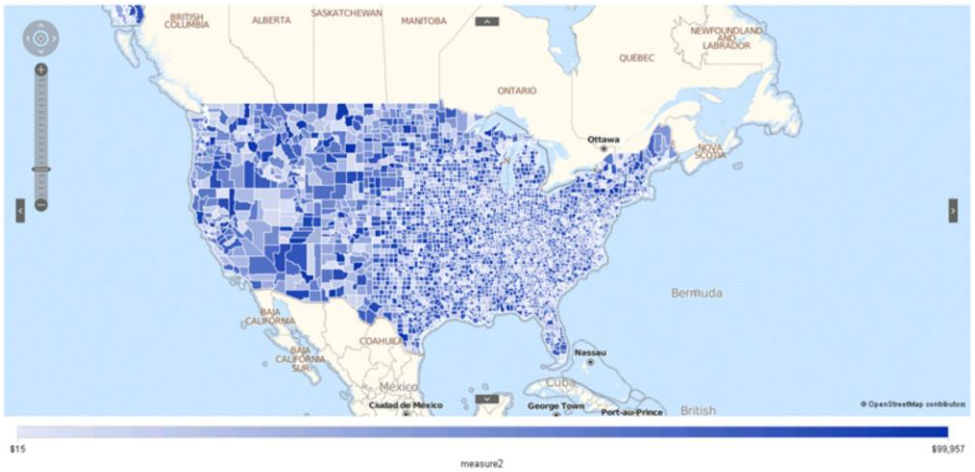
**Important Pre-Requisites you should be aware of:**

**http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#p07rcrnp2cv268n1b2u9zt0fo0k7.htm**


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# Custom Regions – how they render

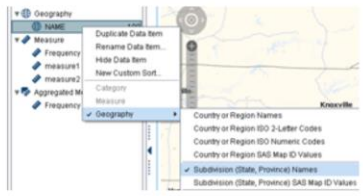
## Custom Regions

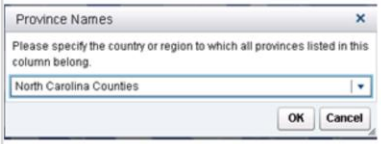


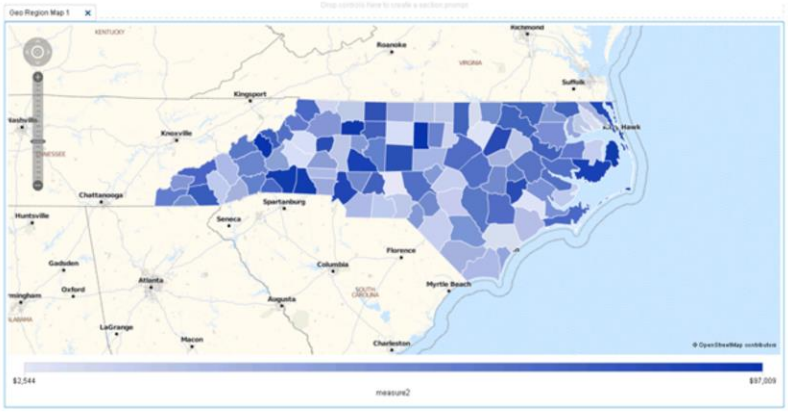

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# Custom Regions – utilize like out of the box maps



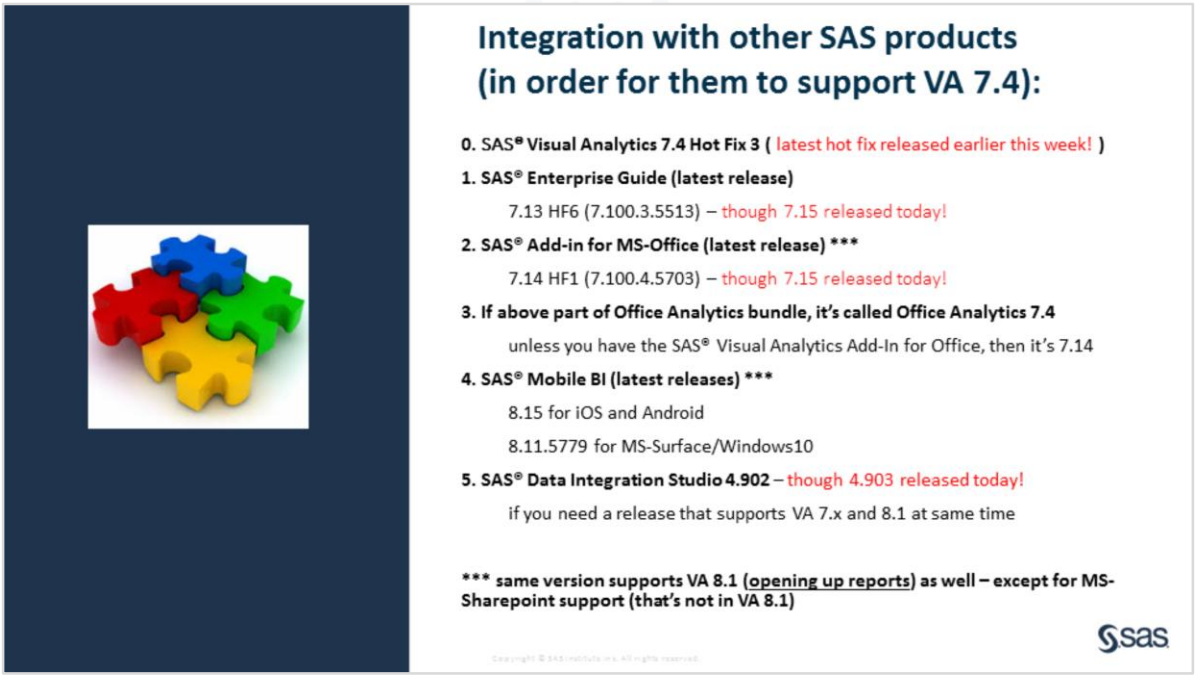








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http://support.sas.com/software/index.html

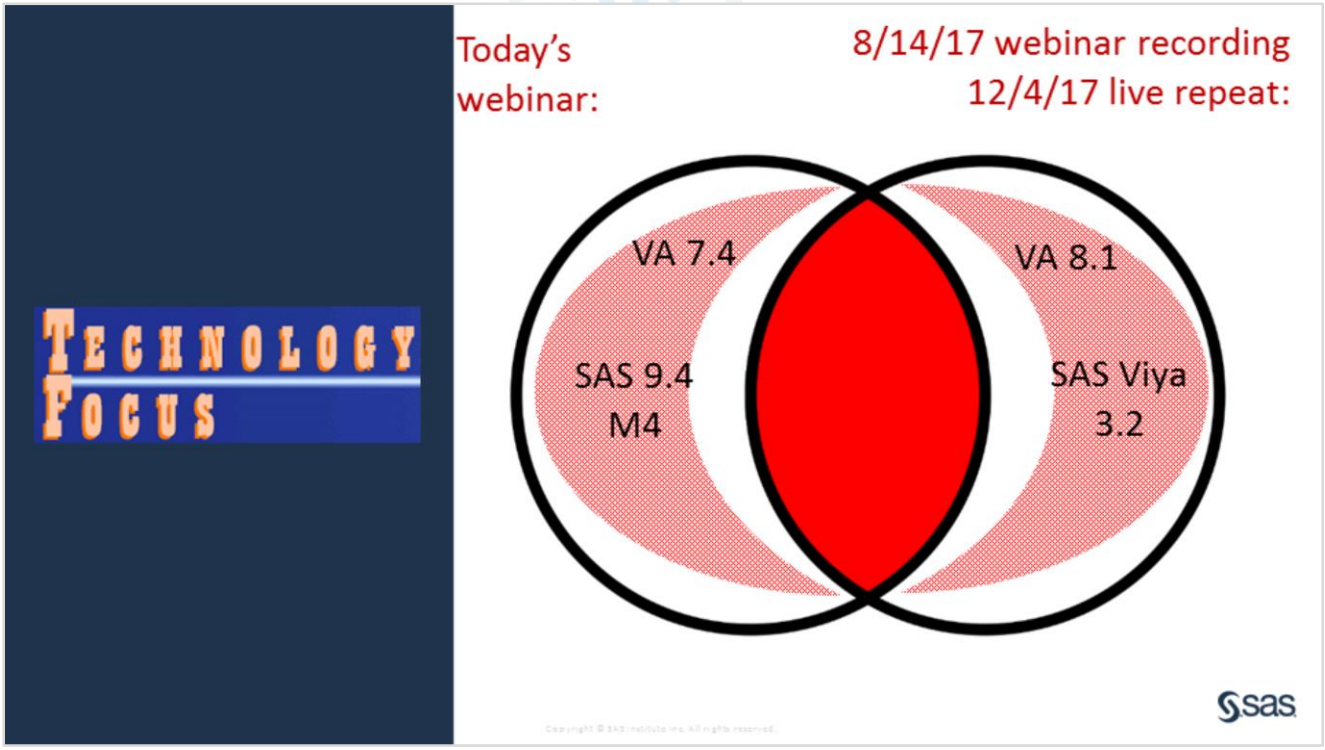
**This is as of Friday, September 22, 2017.**

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Note about SAS Solutions that ship with VAAR … **SAS® Visual Analytics Administration and Reporting**
The next release of a particular SAS Solution, if it continues to run on top of SAS 9.4, it will get updated with the latest 7.x release of Visual Analytics.

If it runs on top of SAS Viya instead, it will then ship with and utilize the latest release of Visual Analytics 8.x instead.


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**SAS Visual Analytics 7.4 has features that 7.3 does NOT have (including common features).**

**SAS Visual Analytics 7.4 has features that 8.1 does NOT have (including common features).**

**Even SAS Visual Analytics 7.3 has features that 8.1 does NOT have (including common features).**

**But yes, SAS Visual Analytics 8.1 has (lots of) features that neither 7.4 nor 7.3 have.**

**And 8.1's HTML-5 interface and Viya architecture is new and unique not found in 7.4 nor 7.3.**

**SAS Visual Analytics 8.1 and it's Viya underpinnings are covered in a later in the summer webinar.**

**Webinar on SAS Visual Analytics 8.1 (recorded and upcoming live repeat):**

**https://www.sas.com/en_us/webinars/sas-va-on-viya-getting-started/register.html**


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# New VA 7.4 features and Yes/No are they in 8.1?

| | |
|---|---|
| **HTML5 Viewer** | |
| • Export data to Excel or .csv | Yes |
| • Export image of graph to a PNG image file | Yes |
| • Page navigation via tabs | Yes |
| • Option to 'expand all' on hierarchies in cross tables | No |
| • Select all and clear selection right mouse options for list prompt controls | No |
| • Sorting on Graphs | Yes |
| • Display the report filter context | Yes |
| | |
| **DYNAMIC TEXT** | NO |
| • Large single-value metric | |
| • Display the date that an in-memory table was last updated. | |
| • Display the value of a parameter. | |
| • Display the value of a category data item associated with a filter control | |
| | |
| **CALCULATIONS** | NO |
| • Option for count distinct that ignores missing values | |
| • Specify reset-to-zero offset of time-based cumulative calculations | |
| • Time period calculations that are not restricted to the applied filter view of data. | |
| | |
| **PROMPTS & PARAMETERS** | NO |
| • Cascading prompts (section/page level and report level) | |
| • Dynamic values for slider controls | |
| • Multi-value parameters | |
| • Parameters based on dates | |
| | |
| **PRINT TO PDF** | NO |
| • PDF Page breaks (list table only; not crosstab) | |
| • Include filter controls in PDF to show filter context | |
| | |
| **OTHER** | NO |
| • Location – custom shape files | |
| • Report & page linking – context from source sets prompt control selections in target instead of filtering choices | |
| • Migration, upgrade in place, & promotion from VA 6.2 or higher | |



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# What's New in SAS® Visual Analytics 7.4

## HTML5 Viewer

- Export data to Excel or .csv
- Export image of graph to a PNG image file
- Page navigation via tabs
- Option to 'expand all' on hierarchies in cross tables
- Select all and clear selection right mouse options for list prompt controls
- Sorting on Graphs
- Display the report filter context

Orange = Not in VA 8.1, but planned for VA 8.2

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# What's New in SAS® Visual Analytics 7.4

## Dynamic Text

- Large single-value metric
- Display the date that an in-memory table was last updated.
- Display the value of a parameter.
- Display the filter context.

Orange = Not in VA 8.1, but planned for VA 8.2

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# What's New in SAS® Visual Analytics 7.4

## Calculations

- Option for count distinct that ignores missing values
- Specify reset-to-zero offset of time-based cumulative calculations (~custom fiscal years)
- Time period calculations that are not restricted to the applied filter view of data.

Orange = Not in VA 8.1, but planned for VA 8.2

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# What's New in SAS® Visual Analytics 7.4

## Prompts & Parameters

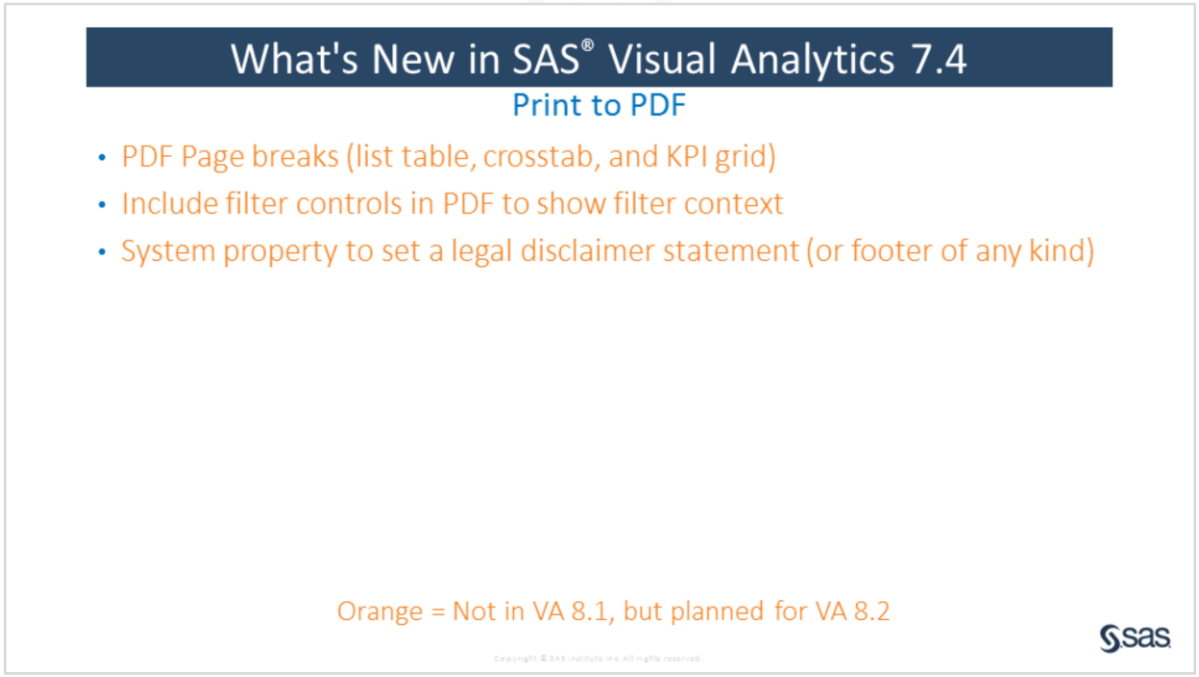
- Cascading prompts (section/page level and report level)
- Dynamic values for slider controls
- Multi-value parameters
- Parameters based on dates

Orange = Not in VA 8.1, but planned for VA 8.2

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**Note … for PDF page breaks and including filter controls, software decides based on paper size how this is rendered.**

**These are not actually user defined.**

**User controlled options for Print to PDF is still:**

- **Paper size**
- **Orientation (Portrait or Landscape)**
- **Margins Top/Bottom**
- **Cover Page**
- **Show Page #s**
- **Expand Clipped Content**
- **Show empty rows and columns in tables**
- **Show Appendix**
- **Show Comments**
- **Select report item(s) to send to PDF**


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# What's New in SAS® Visual Analytics 7.4

## Migration

- Migrate in place or to new hardware
- Promote objects from VA 6.2 or higher (SAS 9.4)

- *Side Notes:*

*- Migration, upgrade in place and promotion from VA 6.2 or higher to 7.4 = YES*

*- 7.1-7.3 -> 8.1 command line (partial) promotion of VA Report content = YES*

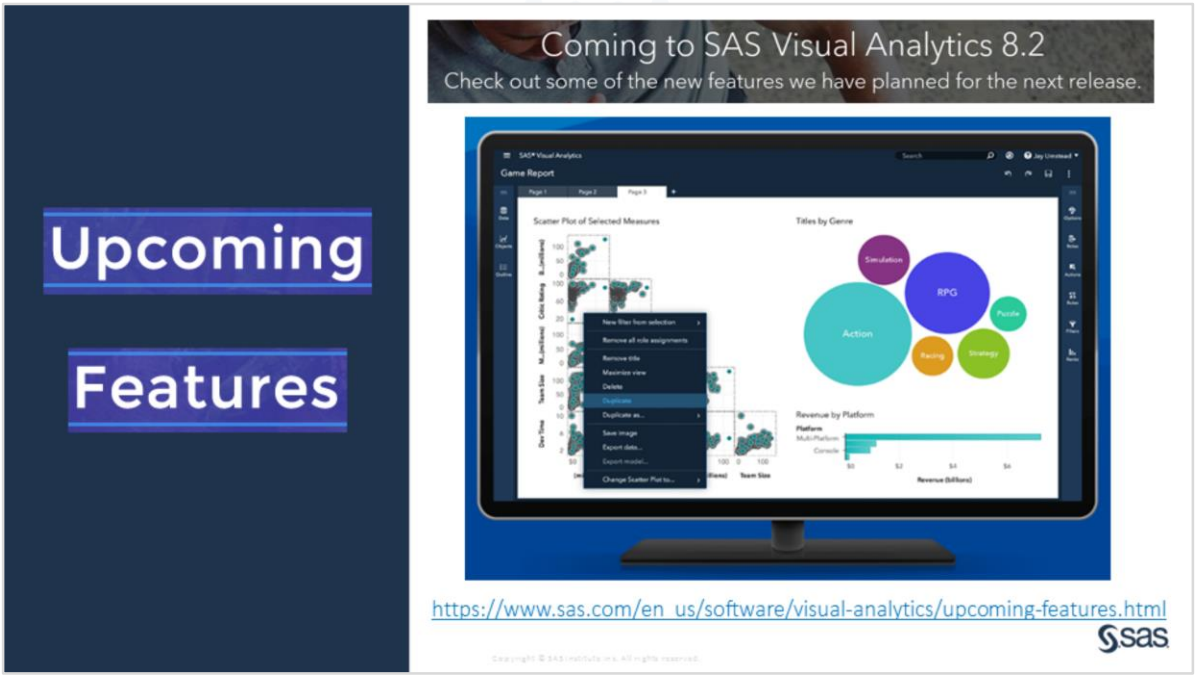
- Ability to migrate or promote from 7.4 to 8.x

Orange = Not in VA 8.1, but planned for VA 8.2

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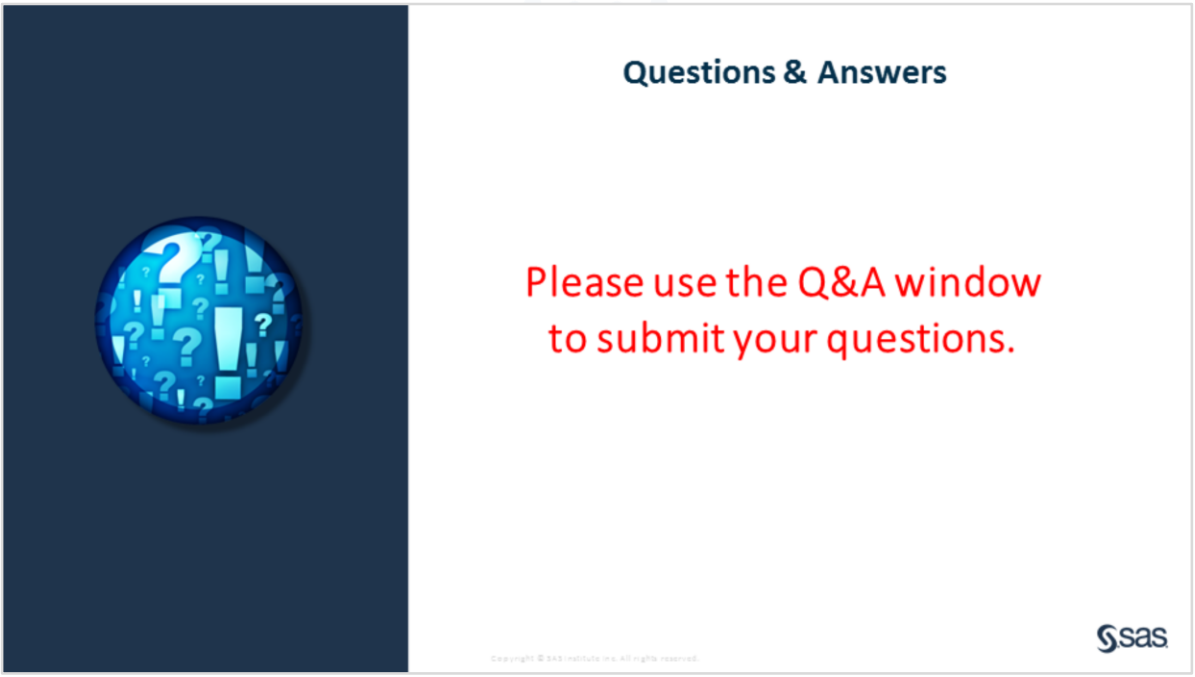



**Coincides and runs on top of Viya 3.3.**

**This release due out Qtr. 4 2017 or by year's end. In the mean time:**

**https://www.sas.com/en_us/software/visual-analytics/upcoming-features.html**


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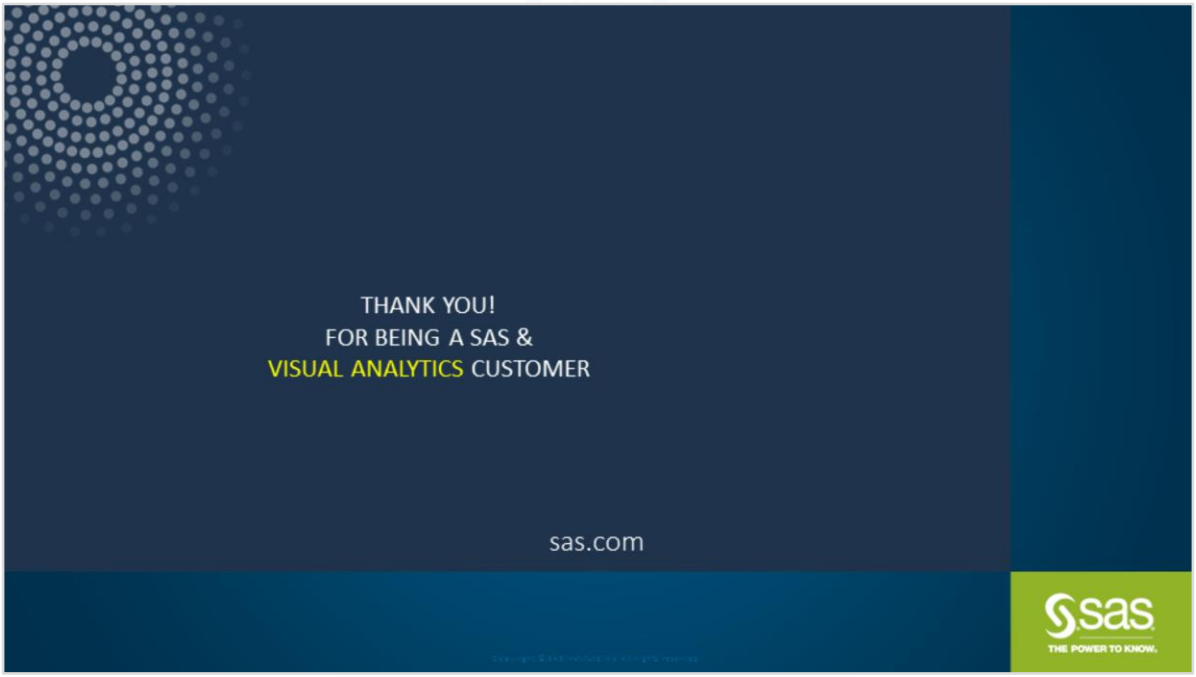

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