What's New in SAS® Visual Analytics 7.4

Friday, September 22, 2017
*** mostly repeat of Friday, June 9, 2017 ***
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
Ideal (not necessarily mandatory) audience for today’s WebEx

a. Your location already has SAS Visual Analytics 7.3 installed and configured, up and running, and you have logged into it.  
(See NOTES section for recording of What was new in 7.3)
b. You already have at least one data file loaded into the software courtesy of a systems or data administrator (or you loaded it yourself).
c. You already know how to maneuver around the differing interfaces and have at least somewhat understanding of their differences (e.g. Designer vs. Explorer).
d. You have already created at least one exploration or one report within the software.
e. You don’t need to be an Expert or even an Intermediate user of the software to benefit from this presentation.

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

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
AGENDA – KEY RELEASE THEMES OF 7.4:

1. HTML5 (Modern) Viewer
2. Dynamic Text
3. Calculations & Aggregations
4. Prompts & Parameters
5. Print to PDF
Bonus … Miscellaneous / Other
   (e.g. admin, custom Geo shapes, integration with rest of SAS)

Note … screen capture examples follow so you have them post-webinar, I will now go to software demonstration instead to show some of these live …

Full details:

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

Initiated via RMB
The new Open Report Window allows you to print and email directly.
2. Dynamic Text

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

Now you can document and display selected Filters, for example ... here it is = Product Brand In (Novelty)

Dynamic values for measures & parameters can be inserted via the roles pane of textbox ...
3. Calculations & Aggregations – Count Distinct

va.IgnoreMissingInCountDistinct
### va.IgnoreMissingInCountDistinct = false

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Name</td>
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<tr>
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<tr>
<td>Format</td>
<td></td>
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<tr>
<td>Aggregation</td>
<td></td>
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<tr>
<td>Sort Options</td>
<td></td>
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#### Aggregated Measure

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<tr>
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<td>Black</td>
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<tr>
<td>Black</td>
<td>Toyota</td>
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<tbody>
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</tr>
<tr>
<td>February</td>
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</tr>
<tr>
<td>March</td>
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</tr>
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<td>Total:</td>
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va.IgnoreMissingInCountDistinct = true

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<th>car</th>
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<td>2</td>
</tr>
<tr>
<td>March</td>
<td>2</td>
</tr>
<tr>
<td>April</td>
<td>1</td>
</tr>
<tr>
<td>May</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 4
VA software still assumes a 12 month Fiscal Year.
3. Reset-to-Zero Offset of Time based Calculations

Set start of year to any month
3. Time Based Calculations not Restricted to Filters

Calculation on all data, apply filter to view

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

VA 7.3

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

VA 7.4
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
- Interactive time-frame filters
4. Cascading Prompts

Now available in report and section level prompts
4. Cascading Prompts

*New > Interaction* now available for section and report level prompts
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
4. Page Linking

More control on source
4. Page Linking

More control on source
Though there appears to be some issue with Section prompts and Drop-down lists with this new feature.

SAS Tech Support is currently investigating.
4. Other enhancements to parameters

Parameters with multiple values and parameters based on dates

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**Multiple Values**
Parameters with multiple values can be used in a list control and use the "in" or "not in" function.

**NOTE:**
A slider control is limited to a single value parameter (including dates).
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.
Direct link to VA 7.4 Admin Guide:

http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#n17ccsfcc5py3m8n16bunb81n3ud8.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
From the VA 7.4 Admin Guide:

http://support.sas.com/documentation/cdl/en/vaag/69958/HTML/default/viewer.htm#n0g5kjtnbvsrwbnt11xil2wahyc5du.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
Custom Regions – how they render

Custom Regions
Custom Regions – utilize like out of the box maps

Province Names
Please specify the country or region to which all provinces listed in this column belong.
North Carolina Counties

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Integration with other SAS products (in order for them to support VA 7.4):

0. SAS® Visual Analytics 7.4 Hot Fix 3 (latest hot fix released earlier this week! )
1. SAS® Enterprise Guide (latest release)
   7.13 HF6 (7.100.3.5513) – though 7.15 released today!
2. SAS® Add-in for MS-Office (latest release) ***
   7.14 HF1 (7.100.4.5703) – though 7.15 released today!
3. If above part of Office Analytics bundle, it’s called Office Analytics 7.4
   unless you have the SAS® Visual Analytics Add-In for Office, then it’s 7.14
4. SAS® Mobile BI (latest releases) ***
   8.15 for iOS and Android
   8.11.5779 for MS-Surface/Windows10
5. SAS® Data Integration Studio 4.902 – though 4.903 released today!
   if you need a release that supports VA 7.x and 8.1 at same time

*** same version supports VA 8.1 (opening up reports) as well – except for MS-Sharepoint support (that’s not in VA 8.1)

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

This is as of Friday, September 22, 2017.

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.
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):
New VA 7.4 features and Yes/No are they in 8.1?

<table>
<thead>
<tr>
<th>HTML5 Viewers</th>
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<tbody>
<tr>
<td>Export data to Excel or .csv</td>
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</tr>
<tr>
<td>Export image of graph to a PNG image file</td>
<td>Yes</td>
</tr>
<tr>
<td>Page navigation via tabs</td>
<td>Yes</td>
</tr>
<tr>
<td>Option to &quot;expand all&quot; on hierarchies in cross tables</td>
<td>No</td>
</tr>
<tr>
<td>Select all and clear selection right mouse options for list prompt controls</td>
<td>No</td>
</tr>
<tr>
<td>Sorting on Graphs</td>
<td>Yes</td>
</tr>
<tr>
<td>Display the report filter context</td>
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</table>

<table>
<thead>
<tr>
<th>DYNAMIC TEXT</th>
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<tbody>
<tr>
<td>Large single-value metric</td>
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</tr>
<tr>
<td>Display the date that an in-memory table was last updated</td>
<td></td>
</tr>
<tr>
<td>Display the value of a parameter</td>
<td></td>
</tr>
<tr>
<td>Display the value of a category data item associated with a filter control</td>
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</table>

<table>
<thead>
<tr>
<th>CALCULATIONS</th>
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<tbody>
<tr>
<td>Option for count distinct that ignores missing values</td>
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</tr>
<tr>
<td>Specify reset-to-zero offset of time-based cumulative calculations</td>
<td></td>
</tr>
<tr>
<td>Time period calculations that are not restricted to the applied filter view of data</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>PROMPTS &amp; PARAMETERS</th>
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<tbody>
<tr>
<td>Cascading prompts (section/page level and report level)</td>
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</tr>
<tr>
<td>Dynamic values for slider controls</td>
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</tr>
<tr>
<td>Multi-value parameters</td>
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<tr>
<td>Parameters based on dates</td>
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<table>
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<tr>
<th>PRINT TO PDF</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PDF Page breaks (list table only; not crosstab)</td>
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</tr>
<tr>
<td>Include filter controls in PDF to show filter context</td>
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</tbody>
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<table>
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</thead>
<tbody>
<tr>
<td>Location - custom shape files</td>
<td></td>
</tr>
<tr>
<td>Report &amp; page linking - context from source sets prompt control selections in target instead of filtering choices</td>
<td></td>
</tr>
<tr>
<td>Migration, upgrade in place, &amp; promotion from VA 6.2 or higher</td>
<td></td>
</tr>
</tbody>
</table>
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
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
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
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
What’s New in SAS® Visual Analytics 7.4

Print to PDF

- PDF Page breaks (list table, crosstab, and KPI grid)
- Include filter controls in PDF to show filter context
- System property to set a legal disclaimer statement (or footer of any kind)

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

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
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
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:

Questions & Answers

Please use the Q&A window to submit your questions.
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  [support.sas.com/books](http://support.sas.com/books)

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