

Creating Parameter Forms for your SAS Jobs in SAS Studio and SAS Visual Analytics

~ Arpit Jain

Customer Advisor – Retail & CPG

arpit.jain@sas.com

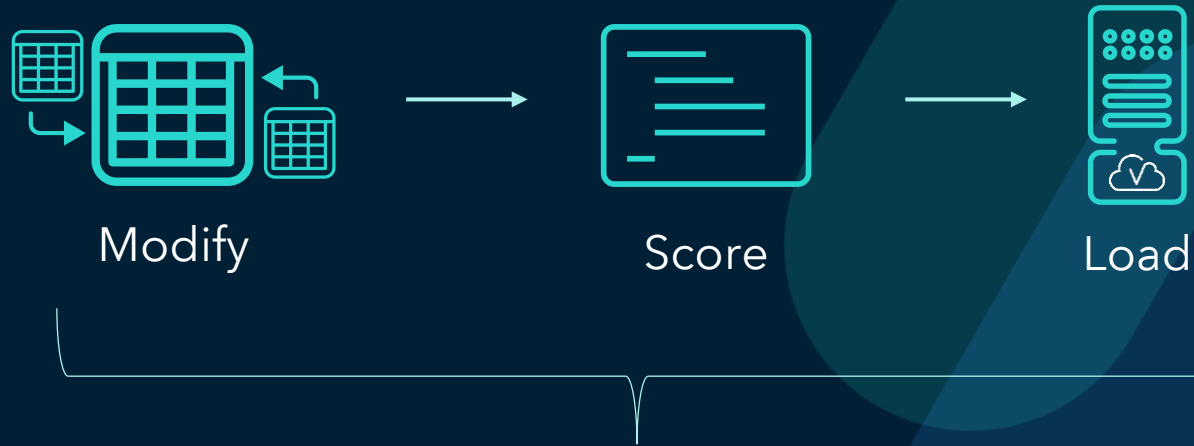
<https://www.linkedin.com/in/arpitjain87/>



Agenda

- Part 1: Basics of the SAS® Viya Job Execution Service
 - Creating Jobs and Working with Job Parameters
 - Job HTML / XML forms
- Part 2: Scenario analysis with SAS® Visual Analytics

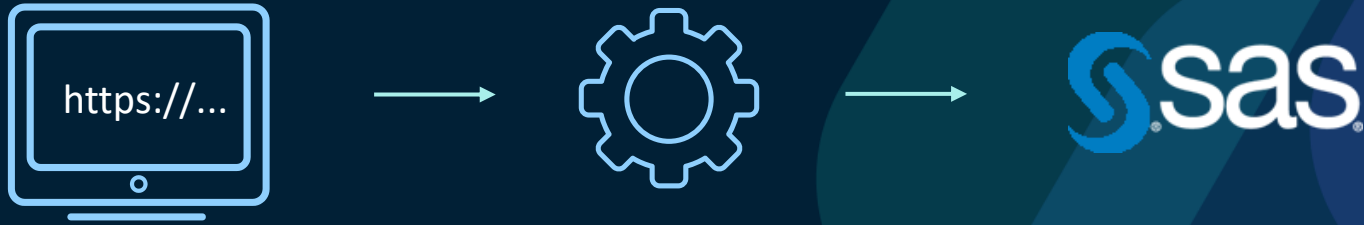
Implementing Scenario Analysis in SAS® Viya



Implementing Scenario Analysis in SAS® Viya



The Viya Job Execution Service (JES) in a nutshell



A user accesses a URL on the
Viya server and SAS code runs

Job Input Parameters



Job input parameters are user-defined values that translate into macro variables



x Date



.../SASJobExecution/?_program=myJob&date=01JAN2020



&date:
01JAN2020

Job Forms and HTML Interfaces

SAS® Visual Analytics - Explore and Visualize

The screenshot shows a web form titled "Warehouse Workforce Planning – Please make your choices and click Submit". The form includes a "Submit" button, a text input for a scenario name, a spinner for workforce percentage changes, a slider for upskilling percentage, a text input for percentage of workers leaving, and a range input for over-manning. The slider is set to 30.00, and the range input has a minimum of 10 and a maximum of 150.

Warehouse Workforce Planning – Please make your choices and click Submit

Submit

Please enter your Scenario name here *

Please choose the Percentage of your workforce that can be increased or decreased

0

Please choose the Percentage of your workforce that can be upskilled

10.00 20.00 30.00 40.00 50.00

Downgrading of workers to a lower skill is possible but a percentage of such workers leave

Please type Percentage who leave

50

Please specify the Over Manning Range

Minimum: * Maximum: *

10 150

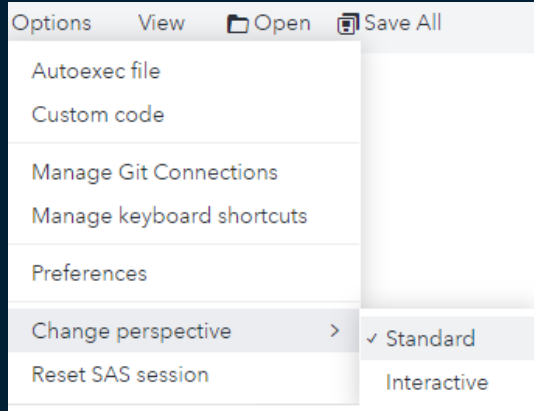
Fraction of production requirements of a full-time employee that is met by each

Job forms can be linked and displayed in a Visual Analytics Web Content object

Basics of the SAS Viya Job Execution Service

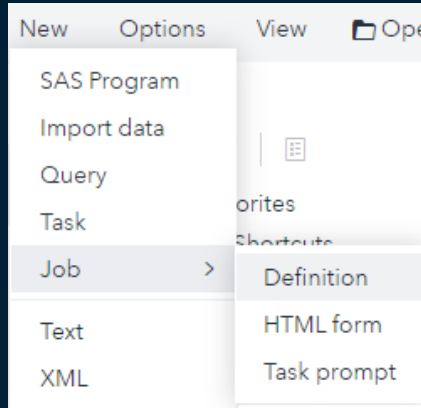
Creating Jobs and Working with Job Parameters

Creating Jobs in SAS Studio V



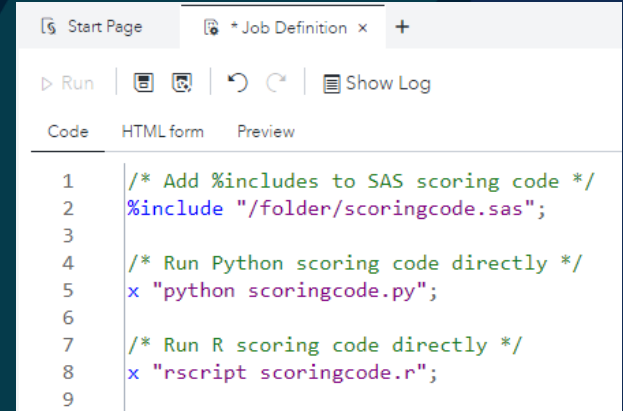
1

Ensure your perspective
is in Standard mode



2

Create a new Job Definition



3

Add your code

Job Input Parameters

The screenshot displays the SAS Model Scoring Job interface. The top navigation bar includes a 'Start Page' link and a tab for '* Model Scoring Job'. Below the navigation bar, there are icons for 'Run', 'HTML form', 'Preview', and 'Show Log'. The main content area is divided into two sections: 'Code' and 'Parameters'. The 'Code' section shows a SAS scoring code snippet with line numbers 1 through 15. The 'Parameters' section is currently active, showing a 'New parameter' button and a form for defining a parameter. The parameter is named '_action', has a 'Field type' of 'Character', a 'Default value' of 'form,execute', and is marked as 'Required' with a toggle switch.

Start Page | * Model Scoring Job x +

Run | HTML form | Preview | Show Log

Code | HTML form | Preview

```
1 /* Add includes to SAS scoring code */
2 %include "/folder/scoringcode.sas";
3
4 /* Run Python scoring code directly */
5 x "python scoringcode.py";
6
7 /* Run R scoring code directly */
8 x "rscript scoringcode.r";
9
10
11
12
13
14
15
```

Parameters

+ New parameter

Name:

Field type:

Default value:

Required: ☒

Parameters
Tab

Special Job Parameters

Parameter

Description

Examples

_action

What to do after accessing the job URL. Accepts multiple comma-separated values.

form,wait,execute
execute

_output_type

Output type to display to the user, such as a webpage or ODS graphics

html
ods_html5
pdf

_debug

Display the SAS log after the job runs

log

Special Job Parameters: `_action`

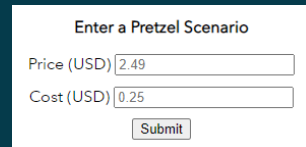
Parameter

Value
form

Description

Display an input form for the user before running the job

Examples



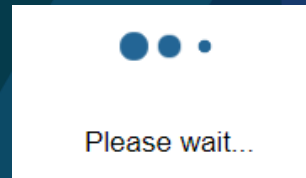
Enter a Pretzel Scenario

Price (USD)

Cost (USD)

wait

Display an animated waiting page while the job is running



execute

Run the job after the user submits the job or accesses the URL

Let's go LIVE



Thank you

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