

Data Analytics Tools & Technique

Chapter 2: Introduction to SAS Enterprise Guide

DA 6223

The University of Texas at San Antonio

Introduction to SAS Enterprise Guide

- The Process of Data Analysis
 - **A**ccessing data sources
 - **C**ombining tables
 - **T**ransforming variables
 - **E**xploring and describing data
 - **V**isualizing patterns in the data
 - **A**nalyzing and modeling data

Introduction to SAS Enterprise Guide

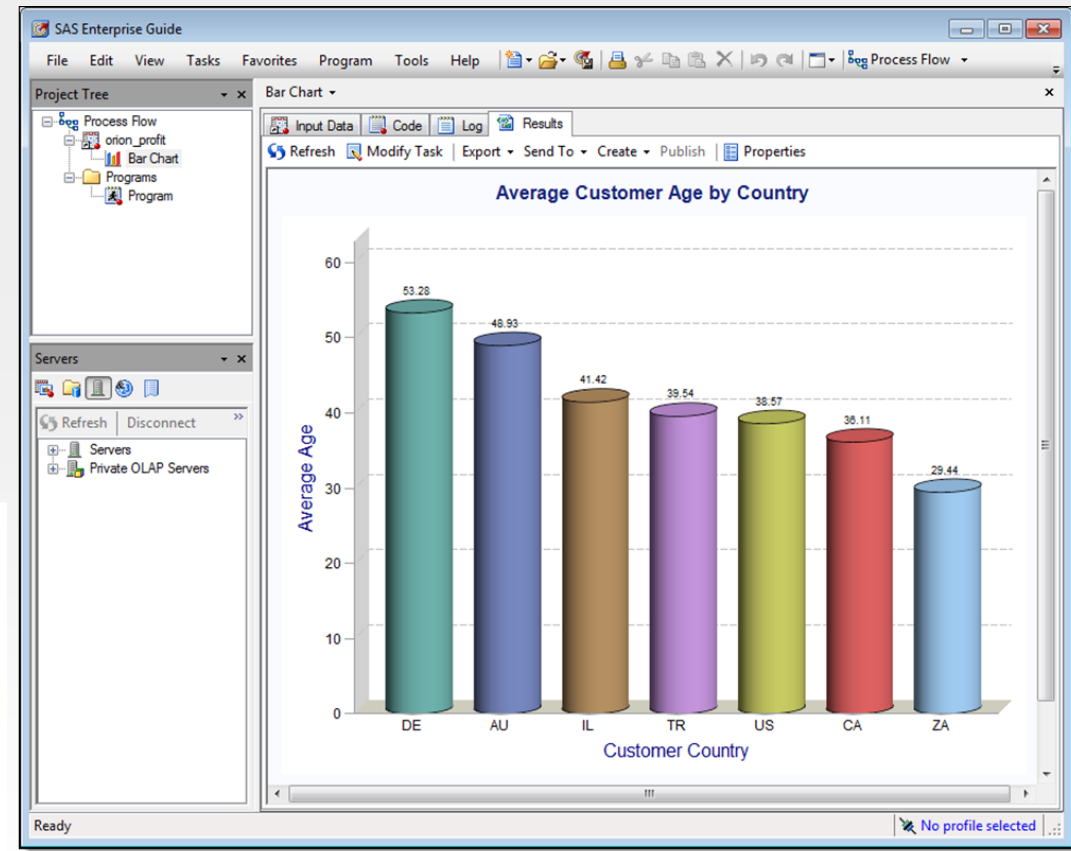
- What is SAS?

SAS is a suite of business solutions and technologies to help organizations solve business problems.



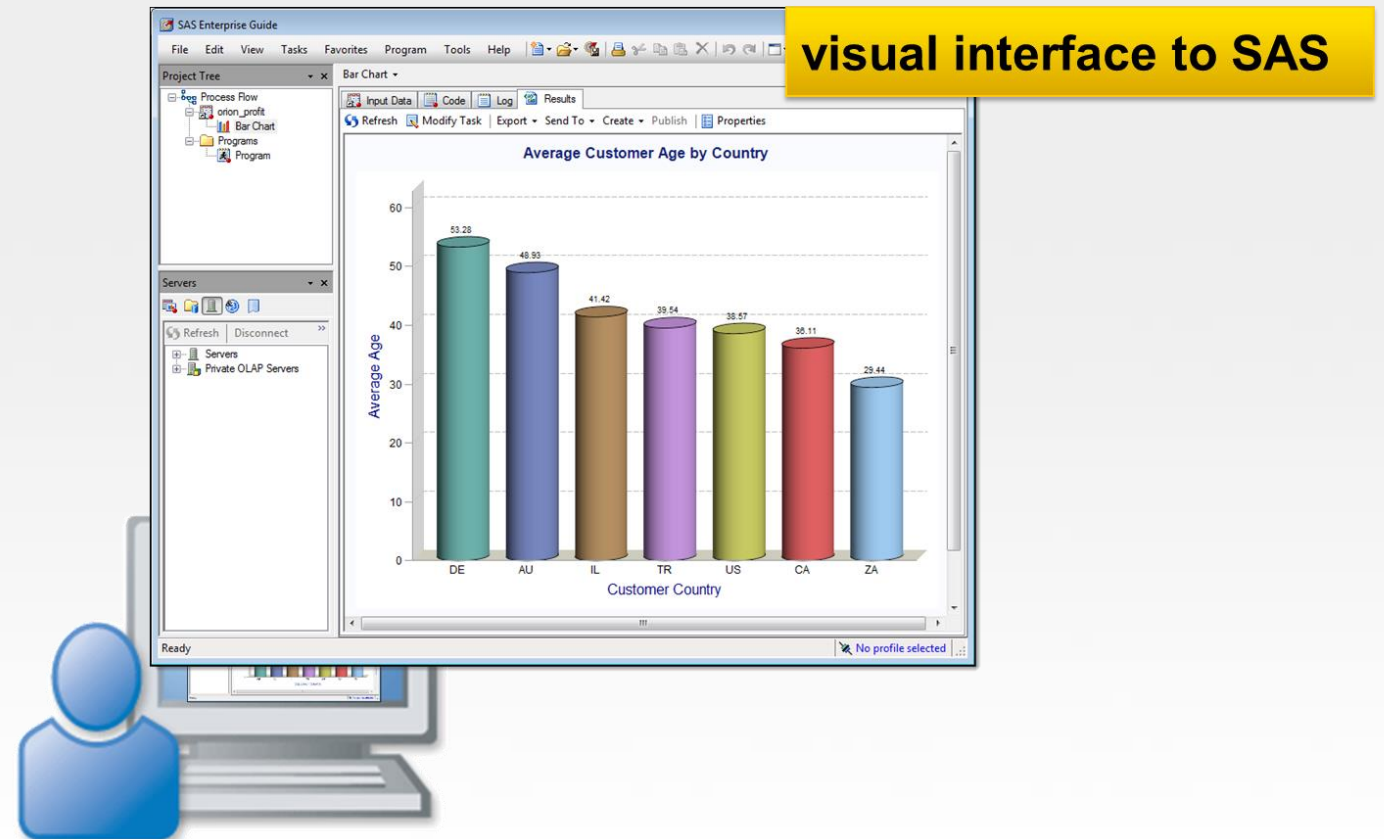
Introduction to SAS Enterprise Guide

- What is SAS Enterprise Guide?



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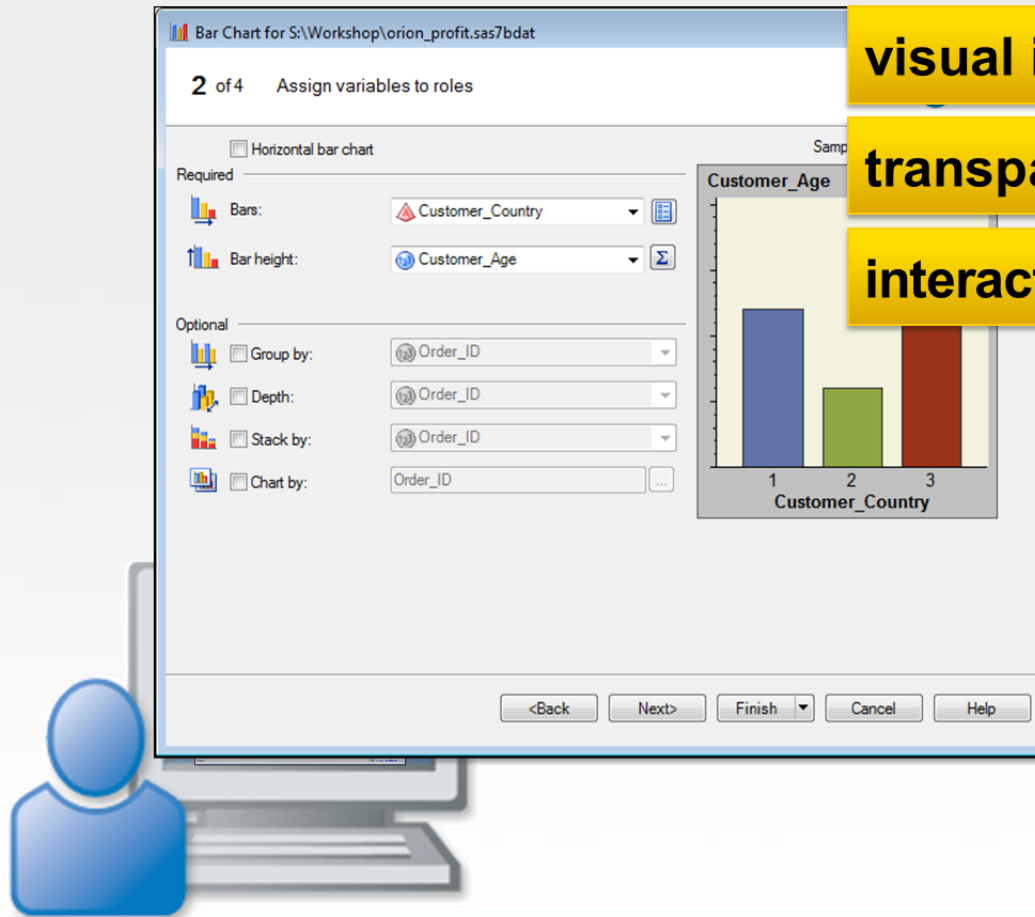
visual interface to SAS

transparent data access



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- What is SAS Enterprise Guide?



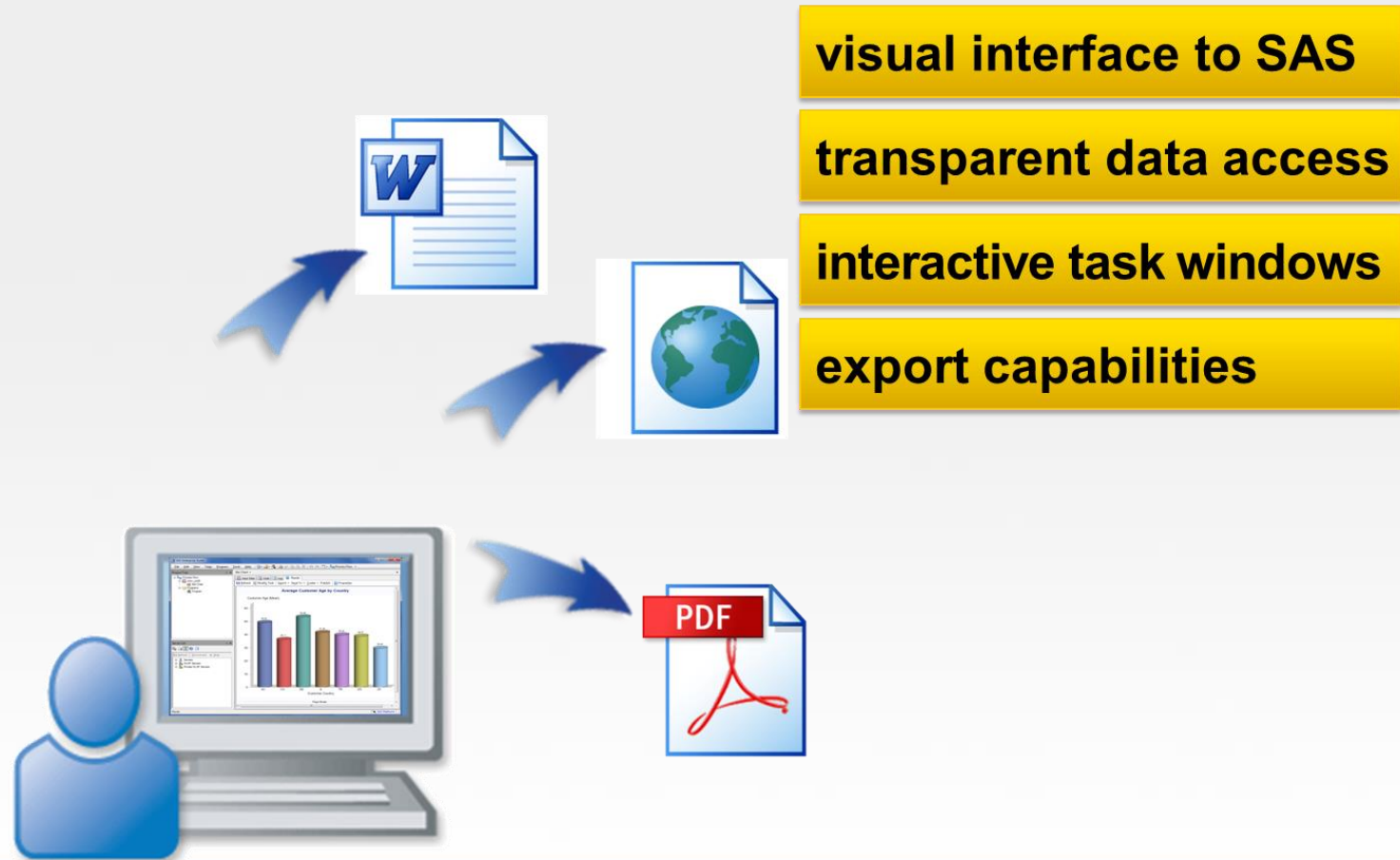
visual interface to SAS

transparent data access

interactive task windows

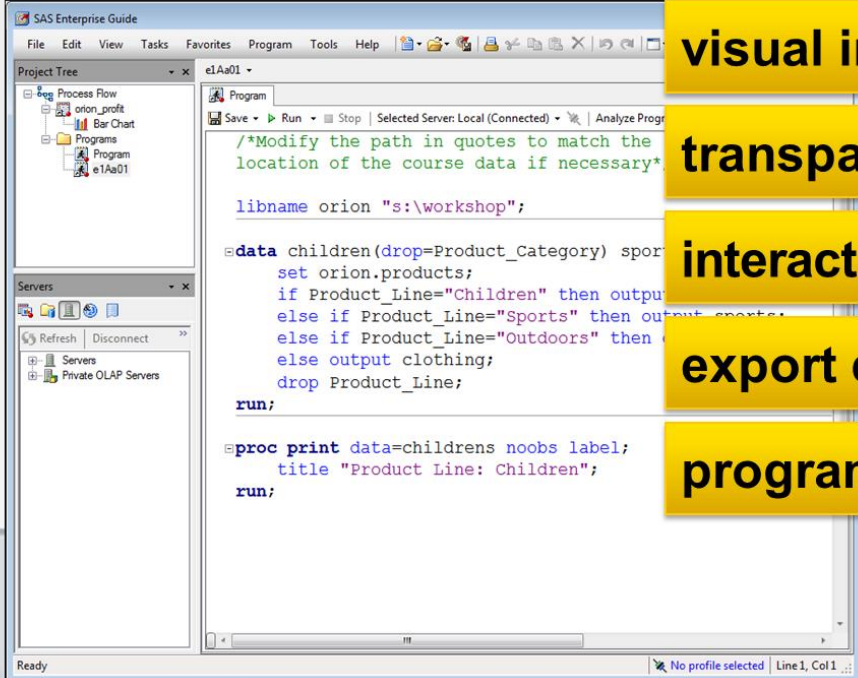
Introduction to SAS Enterprise Guide

- What is SAS Enterprise Guide?



Introduction to SAS Enterprise Guide

- What is SAS Enterprise Guide?



The screenshot displays the SAS Enterprise Guide software interface. On the left, there is a 'Project Tree' showing a project named 'e1Aa01' with sub-items like 'Process Flow', 'orion_profile', 'Bar Chart', and 'Programs'. Below this is a 'Servers' pane showing a list of servers including 'Private OLAP Servers'. The main window displays a SAS program with the following code:

```
/*Modify the path in quotes to match the
location of the course data if necessary*/

libname orion "s:\workshop";

data children(drop=Product_Category) spor
set orion.products;
if Product_Line="Children" then output
else if Product_Line="Sports" then output
else if Product_Line="Outdoors" then
else output clothing;
drop Product_Line;

run;

proc print data=childrens noobs label;
title "Product Line: Children";
run;
```

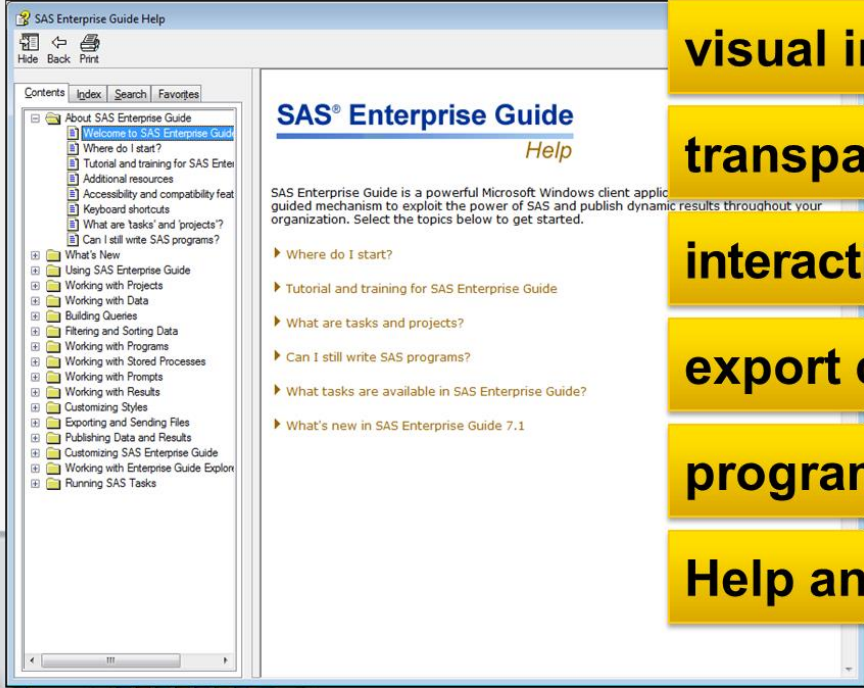
Five yellow callout boxes are positioned to the right of the interface, highlighting key features:

- visual interface to SAS
- transparent data access
- interactive task windows
- export capabilities
- programming interface

A blue icon of a person is located at the bottom left of the interface, and a computer monitor icon is at the bottom center.

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- What is SAS Enterprise Guide?



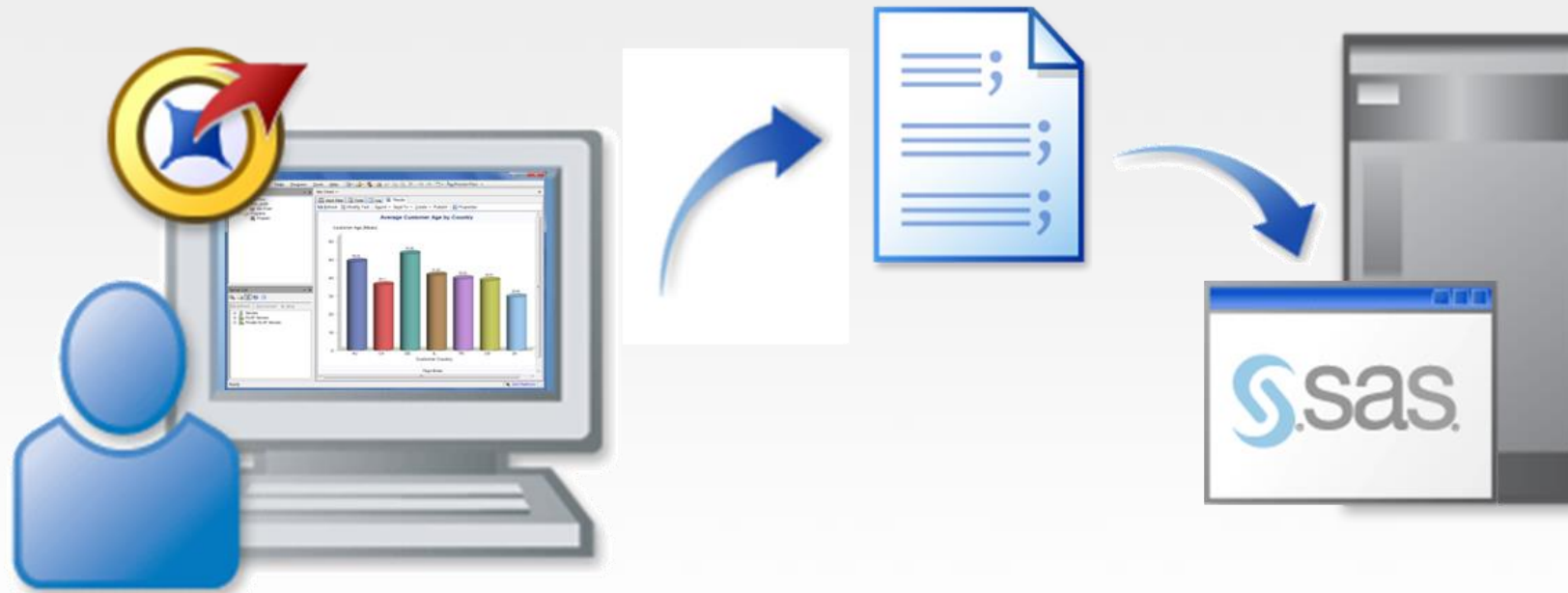
The screenshot shows the 'SAS Enterprise Guide Help' window. On the left is a 'Contents' pane with a tree view of topics including 'About SAS Enterprise Guide', 'Where do I start?', 'Tutorial and training for SAS Enterprise Guide', 'Additional resources', 'Accessibility and compatibility features', 'Keyboard shortcuts', 'What are tasks and projects?', 'Can I still write SAS programs?', 'What's New', 'Using SAS Enterprise Guide', 'Working with Projects', 'Working with Data', 'Building Queries', 'Filtering and Sorting Data', 'Working with Programs', 'Working with Stored Processes', 'Working with Prompts', 'Working with Results', 'Customizing Styles', 'Exporting and Sending Files', 'Publishing Data and Results', 'Customizing SAS Enterprise Guide', 'Working with Enterprise Guide Explorer', and 'Running SAS Tasks'. The main area displays the 'SAS® Enterprise Guide Help' page, which includes a description of the guide as a 'powerful Microsoft Windows client application' and a list of topics to explore.

- visual interface to SAS**
- transparent data access**
- interactive task windows**
- export capabilities**
- programming interface**
- Help and tutorial**

Introduction to SAS Enterprise Guide

- Behind the Scenes

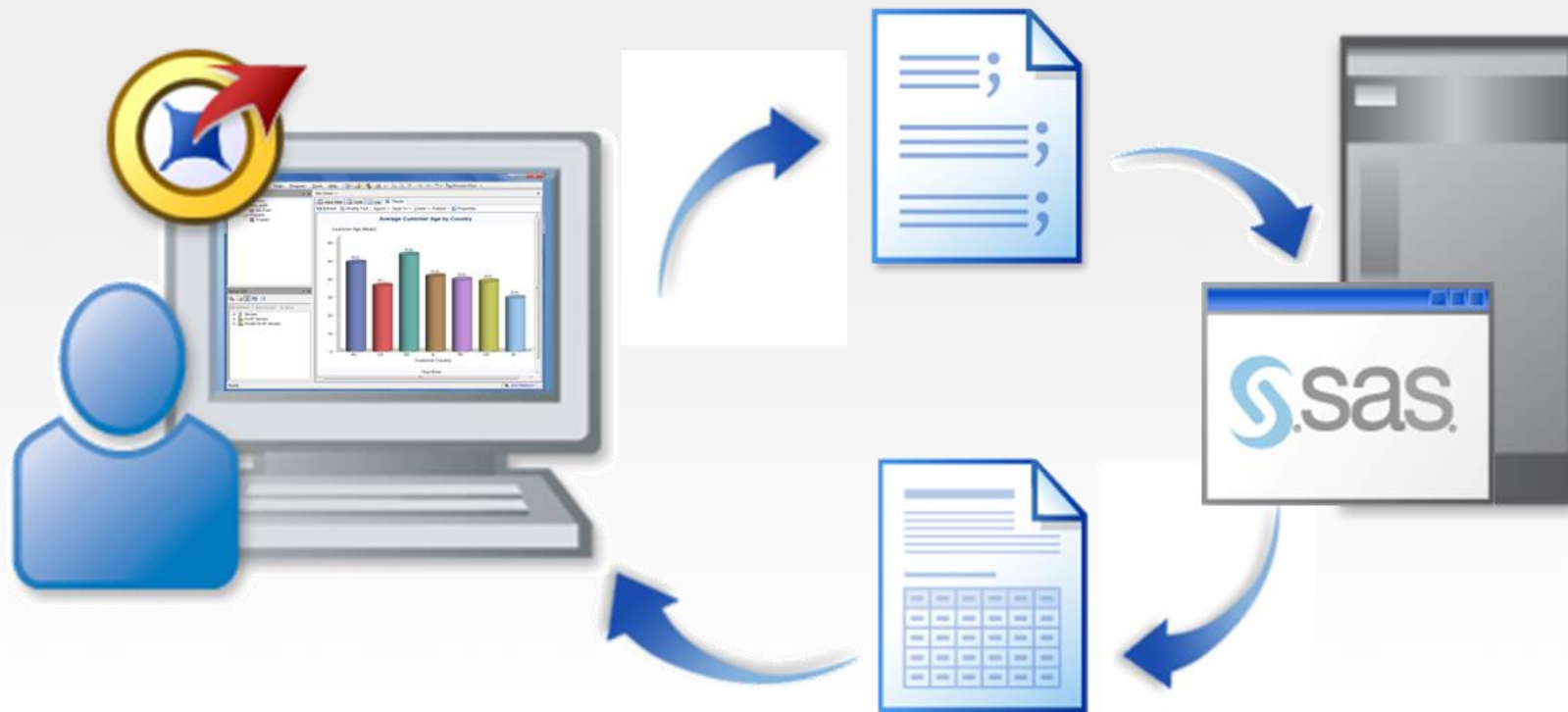
Enterprise Guide prepares SAS code, either generated through point-and-click tasks or written by the user, and submits the code to SAS.



Introduction to SAS Enterprise Guide

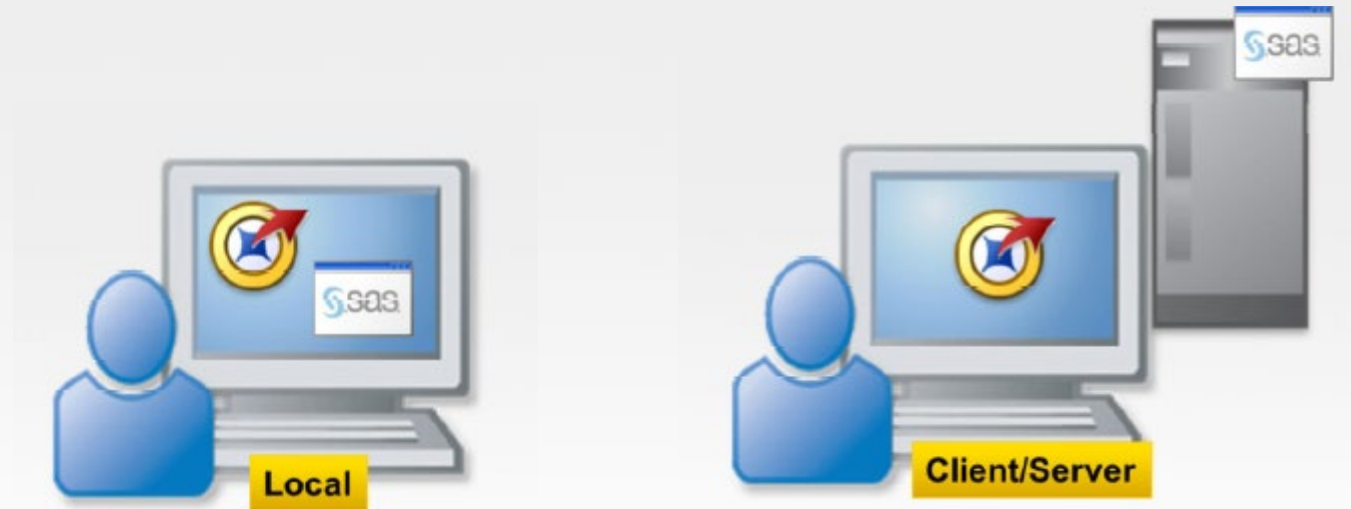
- Behind the Scenes

SAS then executes the code and delivers the results to Enterprise Guide.



Configuration

- Enterprise Guide can be configured to work with SAS either on a local PC or on a remote server.



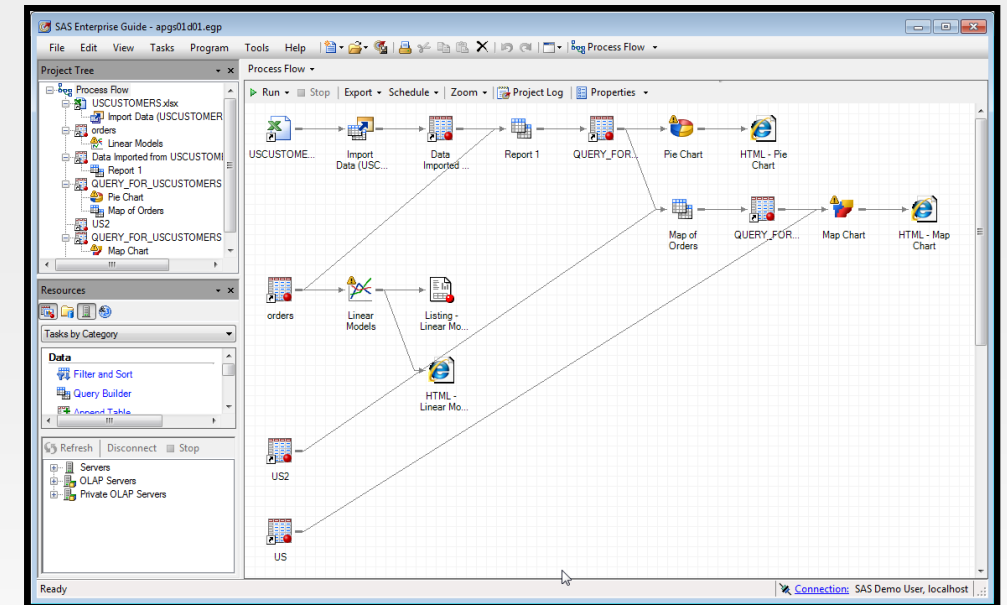
Configuration

- Enterprise Guide can also be used as part of the platform for SAS Business Analytics. Enterprise Guide includes additional features that are related specifically to the SAS platform.



Introduction to SAS Enterprise Guide

- SAS Enterprise Guide Interface: The Project
 - A project serves as a collection of
 - data sources
 - SAS programs and logs
 - tasks and queries results
 - informational notes for documentation.



You can control the contents, sequencing, and updating of a project.

Introduction to SAS Enterprise Guide

- Building a SAS Enterprise Guide Project

To begin work with SAS Enterprise Guide, you

1. create a new project
2. add data to the project
3. run tasks against the data.



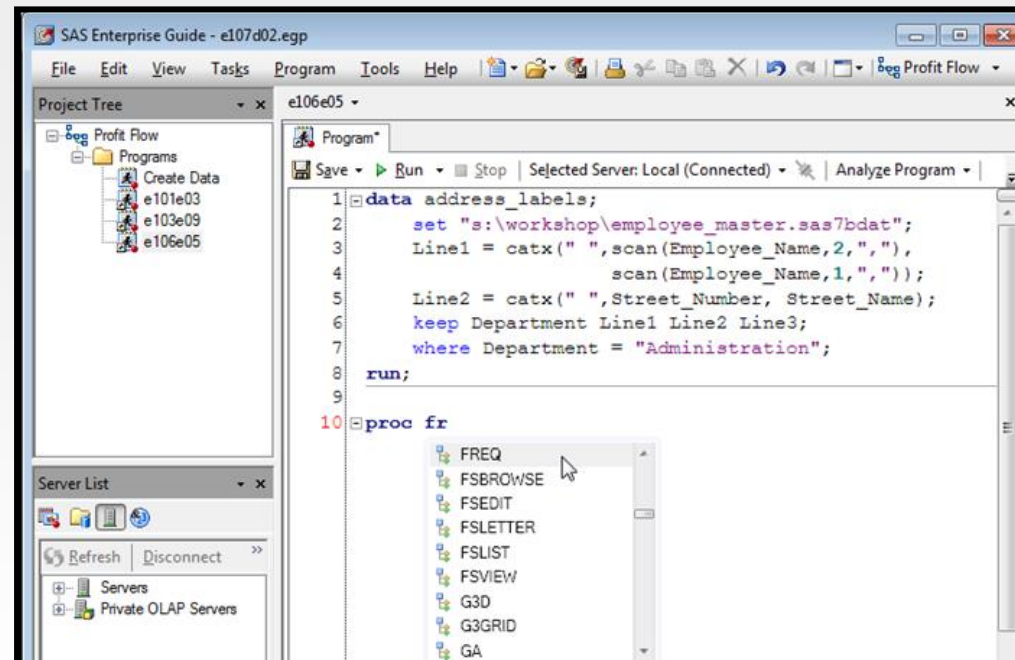
Additionally, you can

4. customize results
5. automate the process.

Introduction to SAS Enterprise Guide

- SAS Enterprise Guide Interface

SAS Enterprise Guide also includes a full programming interface that can be used to write, edit, and submit SAS programs.



Introduction to SAS Enterprise Guide

- Orion Star Sports & Outdoors



For most demonstrations and exercises, you will use data from Orion Star Sports & Outdoors. This is a fictitious global sports and outdoors retailer with traditional stores, an online store, and a large catalog business.

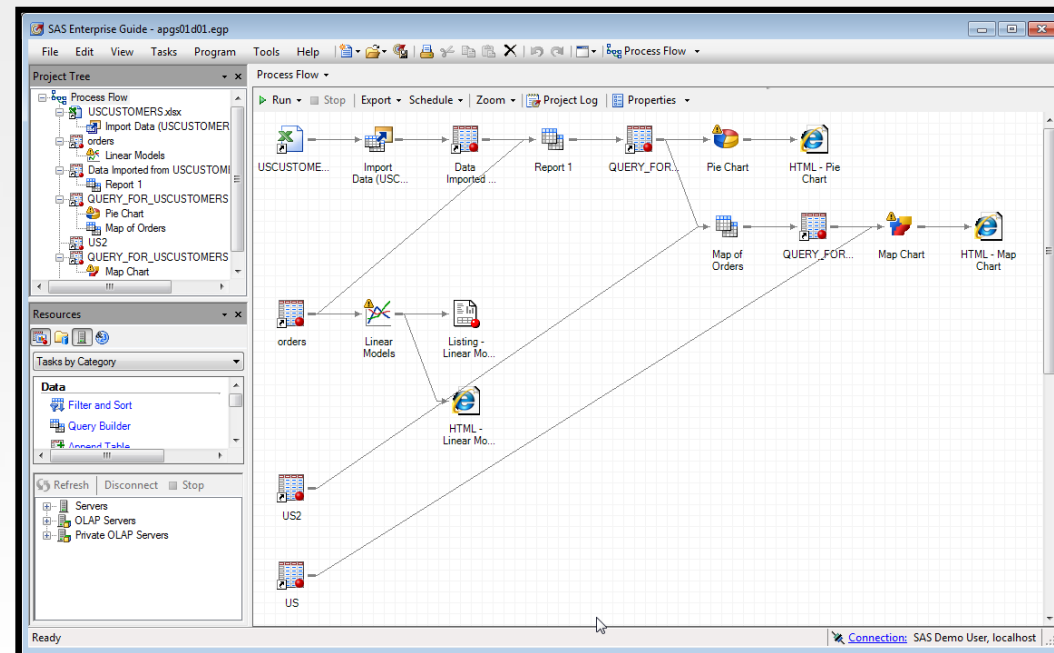
The corporate headquarters is located in the United States with offices and stores in many countries throughout the world.

Orion Star has approximately 1,000 employees and 90,000 customers, processes approximately 150,000 orders annually, and purchases products from 64 suppliers.

Introduction to SAS Enterprise Guide

- Orion Star Project


Throughout the course, you build SAS Enterprise Guide projects that access, combine, transform, explore, and analyze data.



Introduction to SAS Enterprise Guide

- Overview Demonstration

This demonstration illustrates the use of SAS Enterprise Guide to analyze the profits for sporting goods by state among U.S. customer orders from the southwest sales region.

 Many of the tasks shown in this demonstration are discussed later in the course. This demonstration is intended as a broad overview of a typical data analysis case study.

Introduction to SAS Enterprise Guide

- Demonstration: Navigating SAS Enterprise Guide Workspace

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