

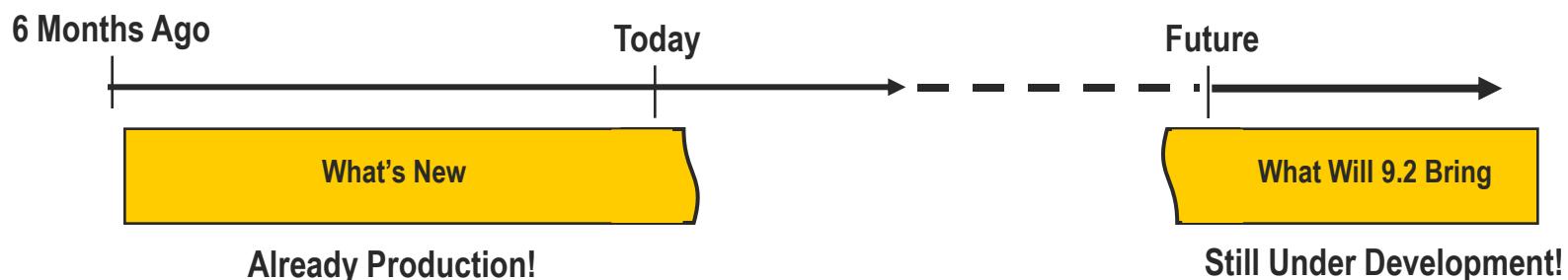


**What's new and what will  
9.2 bring?**

---

**THE  
POWER  
TO KNOW.®**

# SAS Technologies Roadmap



Vista Support  
BI Dashboard  
Visual BI  
Analytic Updates

# Effective Immediately Windows Vista Support with SAS 9.1.3 SP4

- For selected SAS technologies

(<http://support.sas.com/techsup/unotes/SN/020/020402.html>)

Base SAS  
CGI Tools for the Web Server  
SAS Data Quality Server  
SAS Drivers for JDBC  
SAS High-Performance Forecasting  
SAS Integration Technologies Client  
\* JMP  
SAS ODBC Driver  
SAS OnlineDoc for Windows  
SAS OnlineTutor: Basic and Intermediate SAS Programming  
SAS OnlineTutor: Advanced SAS Programming  
SAS OnlineTutor: Business Intelligence  
SAS Power and Sample Size  
SAS Providers for OLE DB 9.1.3  
SAS/ACCESS Interface to DB2  
SAS/ACCESS Interface to ODBC  
SAS/ACCESS Interface to OLE DB  
SAS/ACCESS Interface to Oracle  
\* SAS/ACCESS Interface to PC Files

SAS/ACCESS Interface to Sybase  
SAS/AF  
SAS/ASSIST  
SAS/CONNECT  
SAS/ETS  
SAS/FSP  
SAS/Genetics  
SAS/GIS  
SAS/GRAPH  
SAS/GRAPH ActiveX Control  
SAS/GRAPH Java Applets  
SAS/IML  
SAS/INSIGHT  
SAS/IntrNet CGI Tools  
SAS/LAB  
SAS/ODS  
SAS/OR  
SAS/QC  
SAS/SECURE  
SAS/SHARE  
SAS/Spectraview  
SAS/STAT  
SAS/TOOLKIT

\* JMP Version 7 is supported on Microsoft Vista

\* SAS/ACCESS to PC Files supports up to and including Microsoft Office 2003. However, there is NO support for Microsoft Office 2007.

Important: Enterprise Guide 4.1 and earlier are not supported under Microsoft Vista.

**32-bit Windows Vista Business**

**32-bit Windows Vista Enterprise**

**32-bit Windows Vista Ultimate**

## SAS® Portal

sas.

[Home](#) [Gauge-tastic!](#) [Profit](#) [DashAir](#) [Sales](#) [App. Svcs. Forecasting](#) [Demo](#)

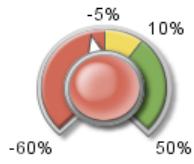
## Corporate Dashboard

## Overall Net Profit Margin



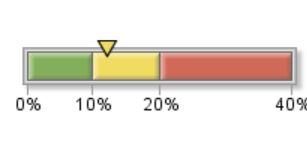
5%

## Operational Costs Vs. Budget



-10% of budget

## Customer Turnover



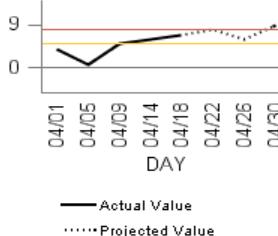
12%

## SLA Violations



9.0

## Response Time Actual And Forecast


 — Actual Value  
 .....Projected Value

## Revenue Per Employee



\$104,321.00

Dashboard: Default Dashboard

[Manage Dashboards](#)

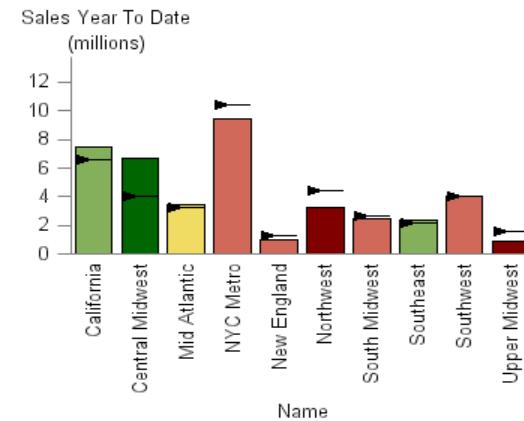
## Product-Country Profit

## - Sports Product Sales By Country

Product, Country	Profit Margin
	0% 15% 25% 50%
Tennis Racket , US	2%
Sleeping Bag , US	7%
Sweatshirt , GB	8%
Basketball , DE	10%
V-Neck Shirt , US	12%
Roller Skates , US	12%
Tennis Racket , AU	16%
Tennis Racket , AU	20%
Off-Court Shoes , IT	25%
Women's Tennis Shoes , DK	32%
Women's Glove , ES	40%

## Sales Snapshot

## US Regional Sales Vs. Forecast



## U.S. Sales Pipeline

Total: \$41,072,095



Region Sales
\$900,000
\$2,420,000
\$3,265,040
\$3,460,000
\$4,012,035
\$6,720,000
\$7,463,020
\$9,460,000

Dashboard: - Sales Snapshot

[Manage Dashboards](#)

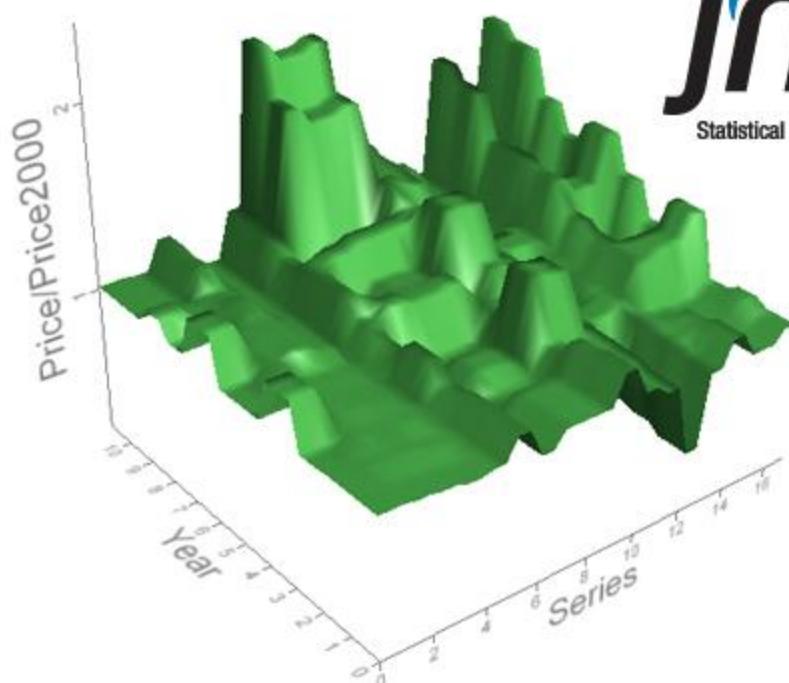
**Browse SAS Data**

**Select Data**

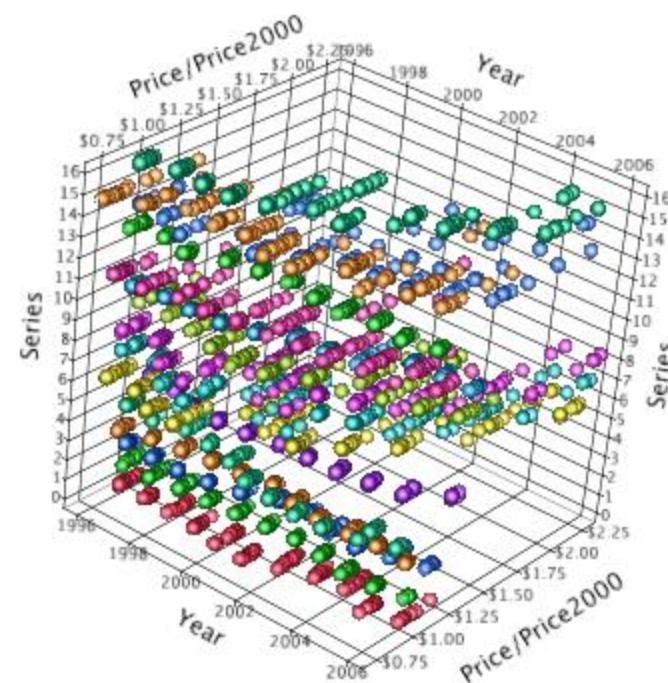
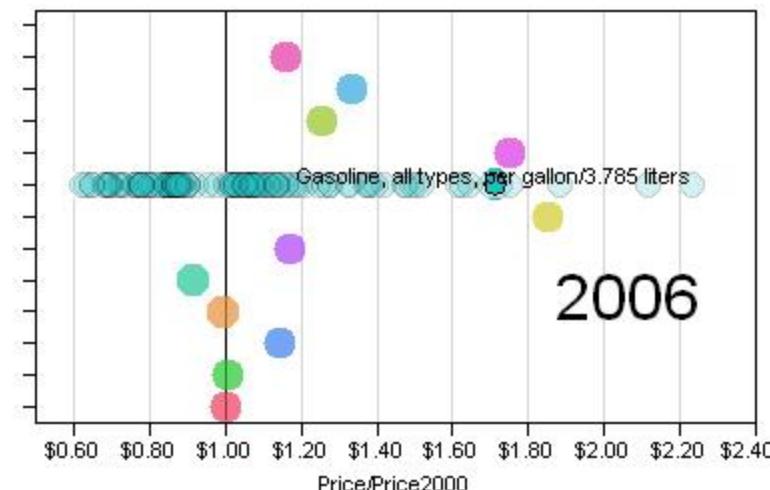
Servers: SASMain Libraries: CONTRACT Market Analysis FLAT JMPGIDB MAPS PRICES PRODUCT SASHelp SASUser SITE WORK

Data: BLSPRICEDATA CHOCOLATEENTERPRISESMARKET GLOBAL2000

Columns: Series Year Month Price stringdate date Price2000 Price\_Price2000



**jmp**  
Statistical Discovery™ From SAS.



# SAS Technologies Futures Roadmap

- SAS 9.2 will be released in 3 waves
  - Wave 1 (End of Q1/Early Q2 2008) : Classic SAS
  - Wave 2 (End of Q2/Early Q3 2008) : Technology Solutions Selected Solutions
  - Wave 3 (Timing still TBD) : Rest of SAS Solutions





## What will 9.2 bring?

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# SAS 9.2 Platform Enhancements

# SAS 9.2

## Improved and New Deployment Options

- Electronic Software Delivery
- SAS Deployment Wizard
- Increased support for silent (and repeatable) installs
- Pre-requisite handling of specified 3<sup>rd</sup> party products
- Optional “phone home” support
- Expanded system requirements support
- Simplified documentation install center

# SAS 9.2

## Changes to client OS Support

- Update OS baseline to reflect marketplace
  - No NT 4 Workstation support
  - No Windows 2000 SP4 Professional
  - Windows XP Pro SP2
  - Windows XP Pro x64, 32 bit compatibility mode
  - Windows Vista
  - Windows Vista x64, 32 bit compatibility mode



# SAS 9.2

## Enhanced System Management

- Start/stop/pause SAS servers from SAS Management Console
- Available logging/monitoring/auditing facilities
- Consistent management options and interfaces

# SAS 9.2

## Expanded Grid Computing Support

- Additional support for other applications being automatically deployed over a grid as well as for other middleware such as DataSynapse



# SAS 9.2

## Improved Web Service Support

- Easier to call a SAS Web Service from anywhere
  - More fine grained WSDL used to define SAS web services
  - Simpler use from standard tools and environments (Visual Studio, Sharepoint, Eclipse)
- Easier to call a web service from SAS - XML Libname engine updated to support WSDL and SOAP.
- Web Service invoked by issuing the Libname statement with the native WSDL type. *Can call web services today using other methods but it is not as clean!*

```
fileref foo "http://www.sas.com/webservice/test.wsdl";
```

```
Libname foo XML type=WSDL ;
```

To do a discover of the methods- returns the methods, input and output parameters, and the description

```
Proc content foo;
```

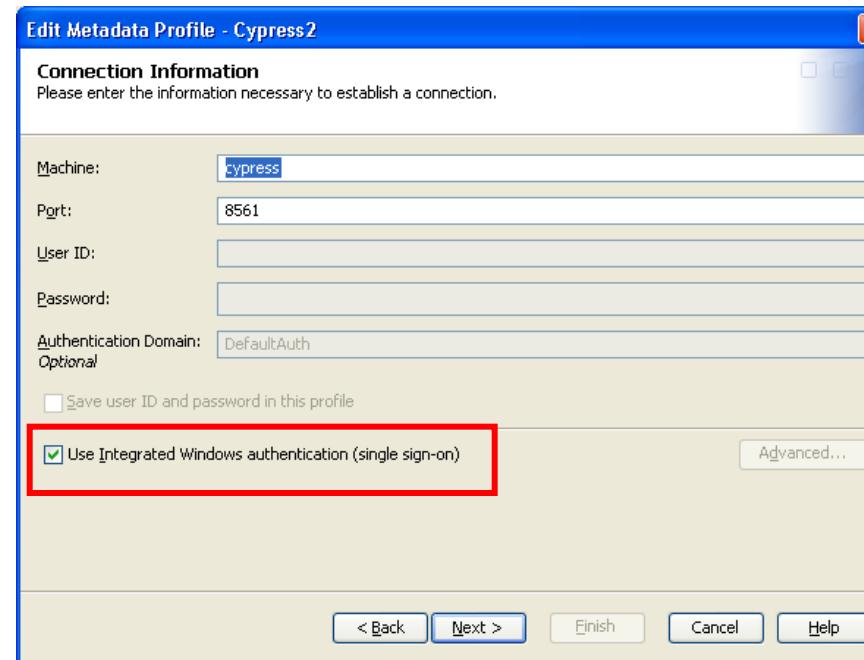
Returns the results from method1 in the web service foo based on the input parameters. Parameters can be a data set, and the Proc can be any Proc and the values would be manipulated appropriately.

```
Proc Print foo.method1(param1=x, param2=y...);
```

# SAS 9.2

## Single Sign On

- Single Sign-On (Windows Only – No Prompting)
- Will be implemented for all SAS platform windows based clients and Web Clients



# SAS 9.2 DI Enhancements

# SAS 9.2

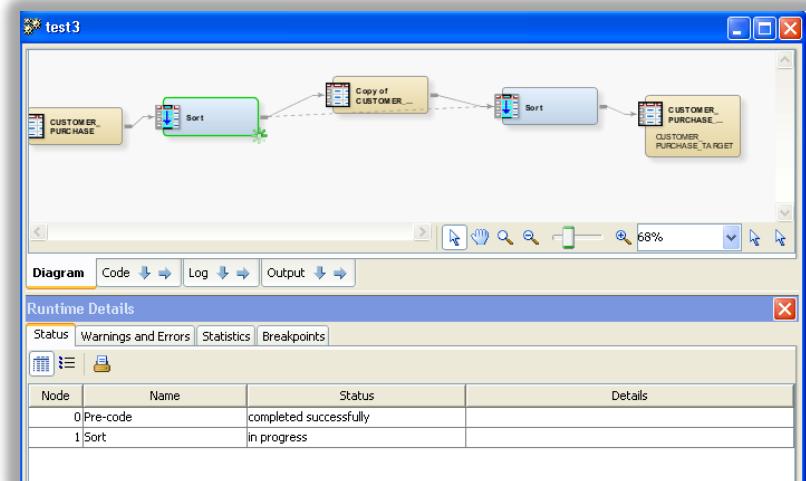
## SAS Data Integration Studio Enhancements

- Rewrote and enhanced all old analysis transforms – custom property sheets also added
  - Summary
  - Freq
  - Tabulate
  - Transpose
  - Surrogate Key Generator
  - Others...
- Runtime statistics captured and graphically displayed

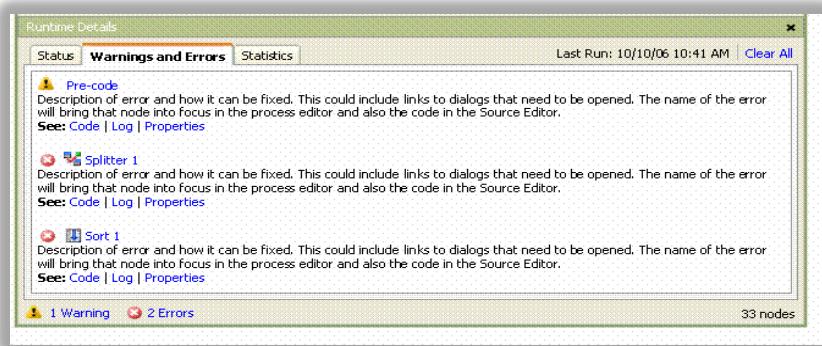
# SAS 9.2

## SAS Data Integration Studio Enhancements

- Runtime progress indicators in the process and new flow representation (standardized across SAS)



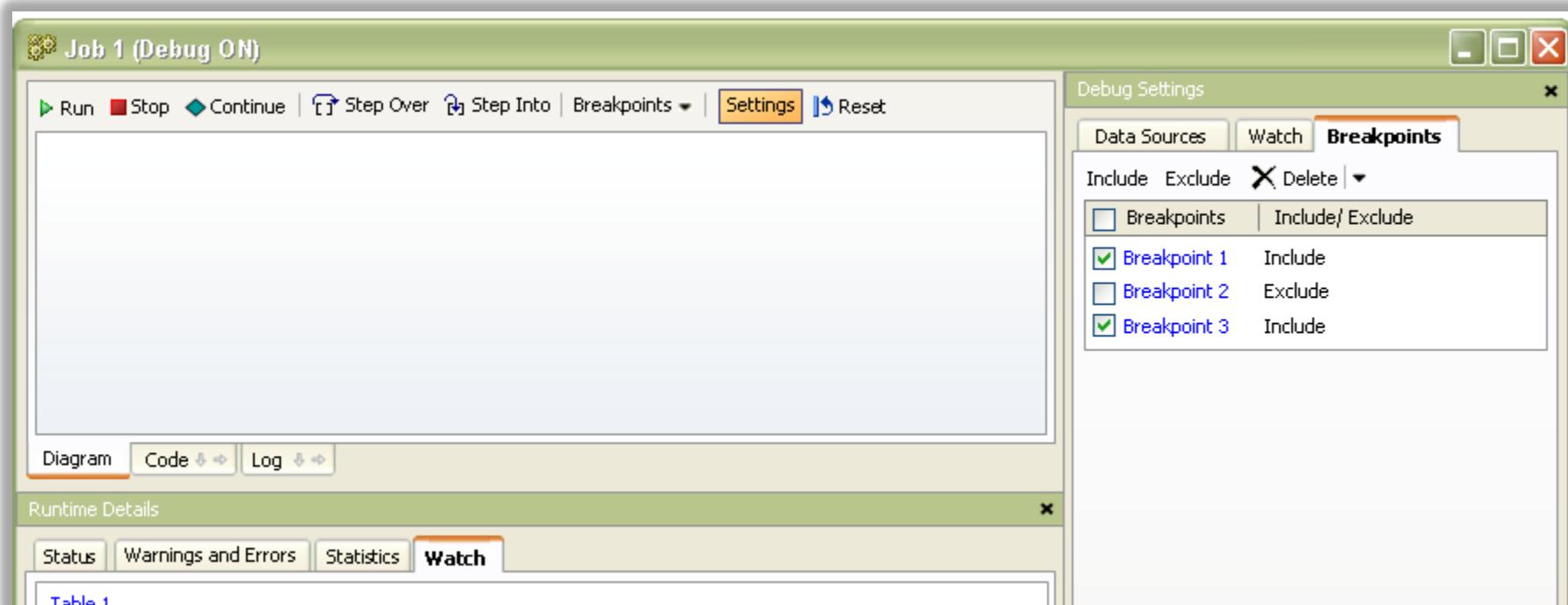
- View of Warnings and Errors with ability to jump right into the log or the code. We will also offer advice as to the likely cause



# SAS 9.2

## SAS Data Integration Studio Enhancements

- Integrated Debugging:
  - Supports: breakpoints, run from here, step, continue, environment display, others...



# SAS 9.2 Storage Enhancements

# SAS 9.2

## New Storage Engine

- Tentatively called SAS Table Server
  - Leverage SAS metadata architecture and security policies
  - Consistent transparent access to all data sources (SAS and non-SAS\*)
  - Aligns to industry standards like SQL-99, ODBC and JDBC

\* Non-SAS data access requires an access engine

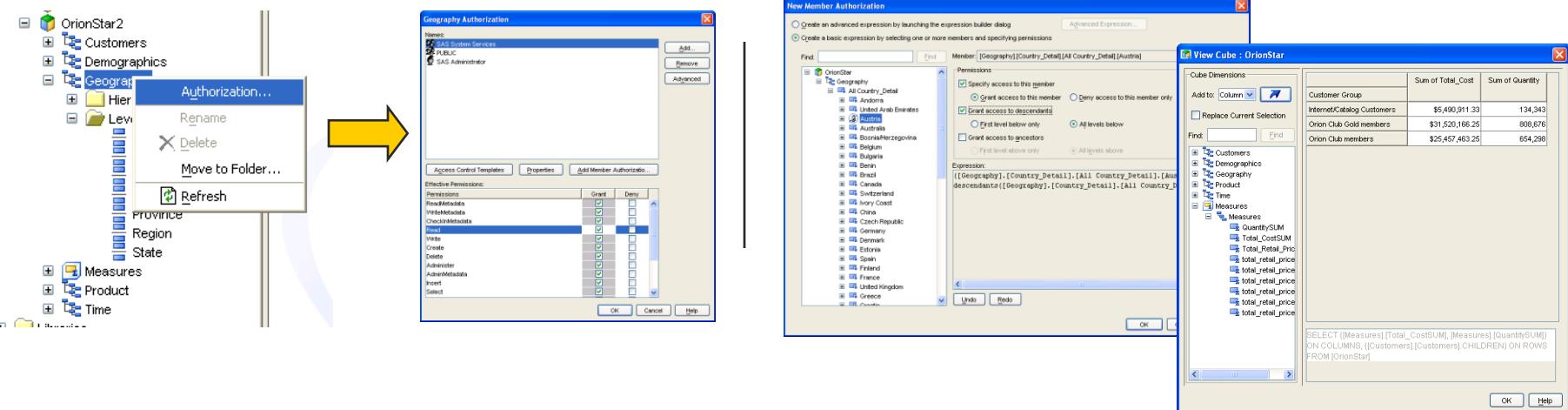
# SAS 9.2 OLAP Server Enhancements

- Incremental Cube Update:
  - Easier to update the very large cubes SAS supports. Refresh times significantly reduced
  - Available options for updating a cube:
    - Add new data
    - Add new members per dimension table
    - Member property updates for existing members



# SAS 9.2 OLAP Cube Studio Enhancements

- Provide security settings
- Carry out an incremental update
- Allows for preview and validation of cube without leaving the admin interface



The image displays three windows from the SAS OLAP Cube Studio:

- Hierarchy Tree:** Shows a tree structure for the cube "OrionStar2". A context menu is open over the "Hier" node, with the "Authorization..." option highlighted. A yellow arrow points from this menu to the "Geography Authorization" dialog.
- Geography Authorization Dialog:** This dialog allows setting permissions for the "Geography" dimension. It shows a grid of permissions (Grant, Deny) for various roles like PUBLIC, SAS Administrator, and specific users. The "Grant" column is selected.
- New Member Authorization Dialog:** This dialog is used to define security settings for a new member. It includes fields for "Member" (set to "[Geography].[Country\_Detail].[All Country\_Detail].[Austria]"), "Permissions" (set to "Grant access to this member" and "Grant access to descendants"), and an "Expression" field containing the formula "[{Geography}.({Country\_Detail}).(All Country\_Detail).{Austria}].descendants".
- View Cube : OrionStar Window:** This window provides a preview of the cube data. It shows the cube dimensions (Customer Group, Internet\Catalog Customers, Orion Club Gold members, Orion Club members) and measures (Sum of Total\_Cost, Sum of Quantity). Below the table is a SQL query: "SELECT1 ([Measures].[Total\_CostSUM], [Measures].[QuantitySUM]) ON COLUMNS, [[Customers].[Customers].CHILDREN] ON ROWS FROM [OrionStar]".

# SAS 9.2

## OLAP Monitoring and Management

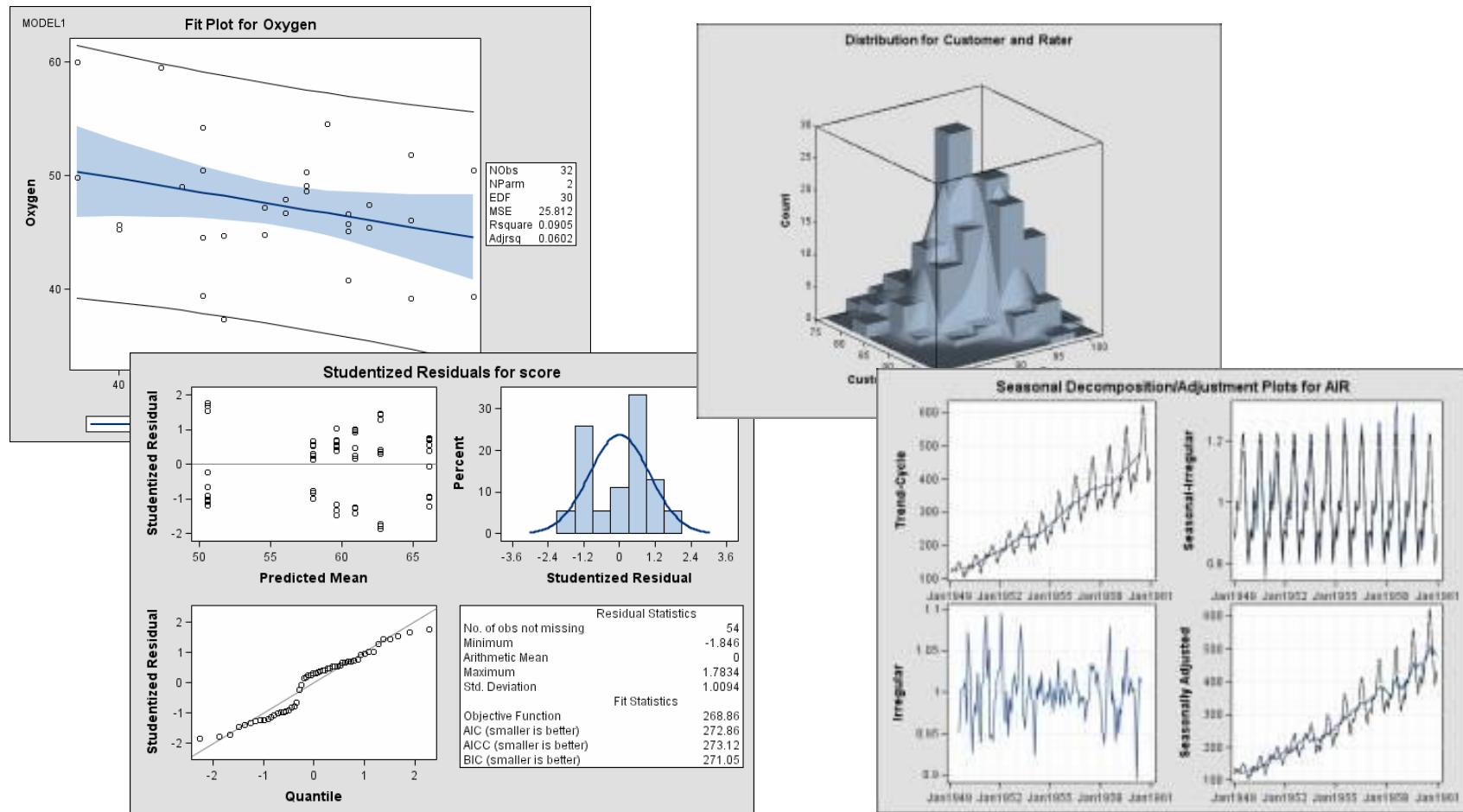
- New Batch Management

### Proc OLAPERATE – batch interface to OLAP Server

- list sessions and queries for an active OLAP server
- close individual active sessions
- cancel/close individual open result sets
- disable a cube or all cubes
- enable a cube or all cubes
- refresh a cube or all cubes
- stop the OLAP server

# SAS 9.2 Analytics Enhancements

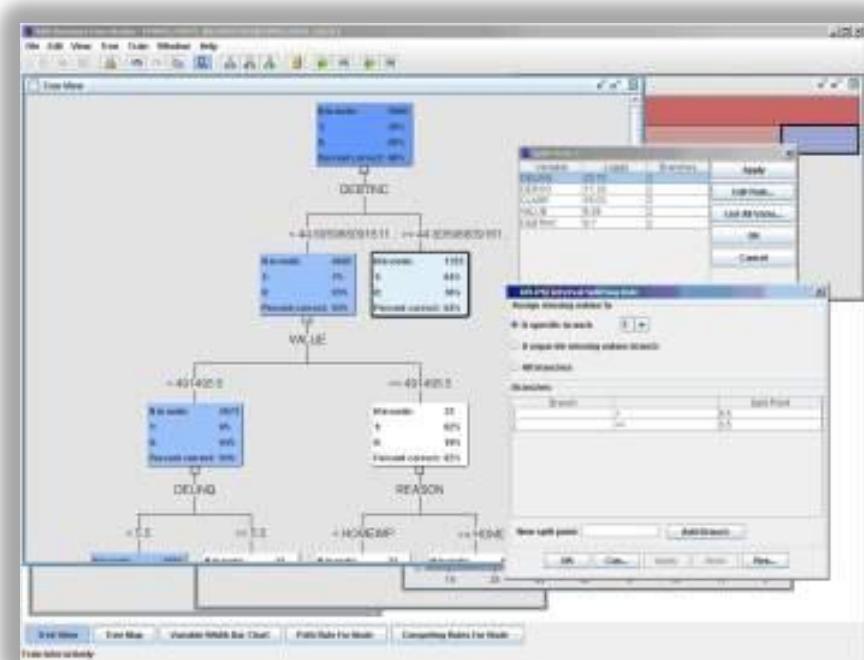
# SAS 9.2 NEW Graphics



# SAS 9.2

## SAS Enterprise Miner enhancements

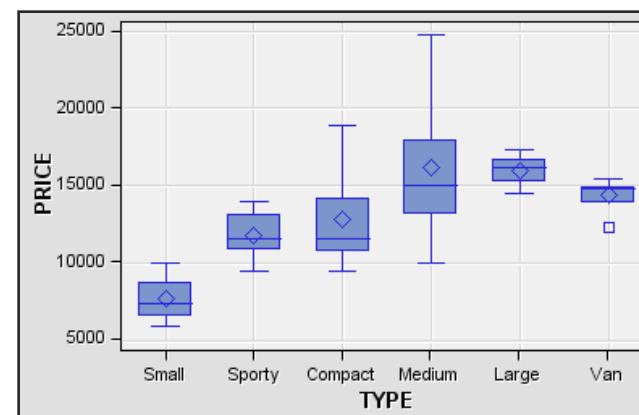
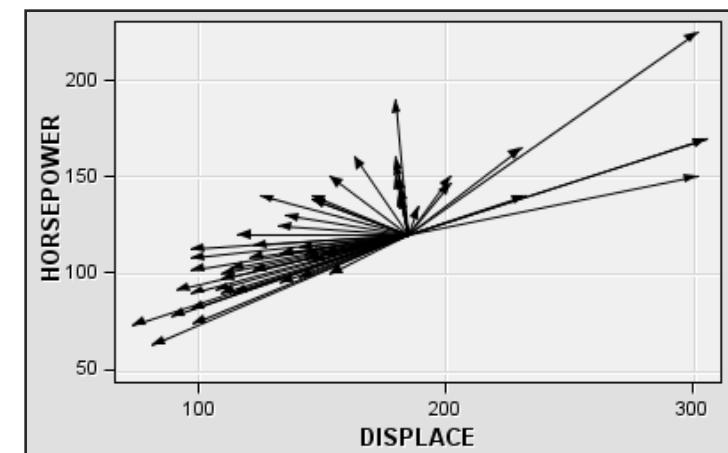
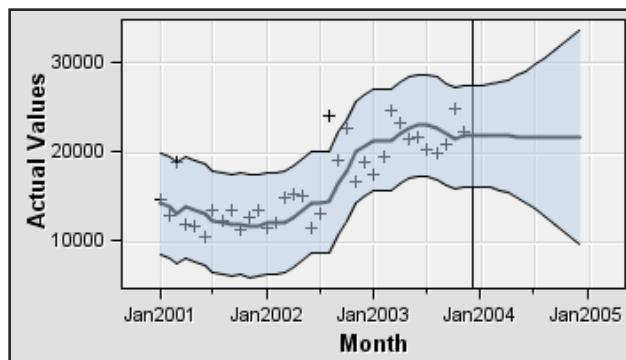
- New predictive modeling nodes
  - Support vector machines
  - Extended Tree Training
    - Gradient boosting (GRADBOOST)
    - Random forests (FOREST)
  - Enhanced Linear Regression Node



# SAS 9.2

## SAS Enterprise Miner enhancements

- New clustering nodes
  - Hierarchical Clustering
  - Variable Clustering –VARCLUS
- Other new nodes
  - Interactions builder
  - Graph Explorer



# SAS 9.2 BI Enhancements

# SAS 9.2

## Cross Client BI Enhancements

- Updated BI Client Browser Support



Windows and Certain Linux Flavors  
1.5 and 2



Windows – continued support for  
some earlier versions too

# SAS 9.2

## Cross Client BI Enhancements

- Web Application Servers – note JBOSS not Tomcat

### JBOSS 4.04 (embedded Tomcat)

- Windows x64 (x86-64) that includes Windows Server 2003 x64, Windows XP Pro x64. In addition it will include 2007 planned releases of Windows Longhorn Server x64 and Windows Vista x64
- Windows 32-bit (x86) that includes Windows 2000 Professional, Windows XP Pro, Windows 2000 Server, Windows Server 2003. In addition it will include 2007 planned releases of Windows Longhorn Server Desktop and Windows Vista
- Linux on x64 (x86-64) that includes Red Hat 4 and Novell SuSE SLES 9
- Linux 32-bit (x86) that includes RHEL 4 and Novell SuSE SLES 9
- Solaris on SPARC (Solaris 9, 10)
- AIX on Power (AIX 5.3)
- HP/UX on Itanium (HP-UX 11.23, 11.31)
- Solaris 10 x64 (x86-64) (Solaris 10)

### BEA WebLogic 9.2

- Windows 32-bit (x86) that includes Windows 2000 Professional, Windows XP Pro, Windows 2000 Server, Windows Server 2003. In addition it will include 2007 planned released of Windows Longhorn Server Desktop and Windows Vista
- Solaris on SPARC (Solaris 9, 10)
- AIX on Power (AIX 5.3)
- HP/UX on Itanium (HP-UX 11.23, 11.31)
- Solaris 10 x64 (x86-64) (Solaris 10)

### IBM WebSphere 6.1.0.2

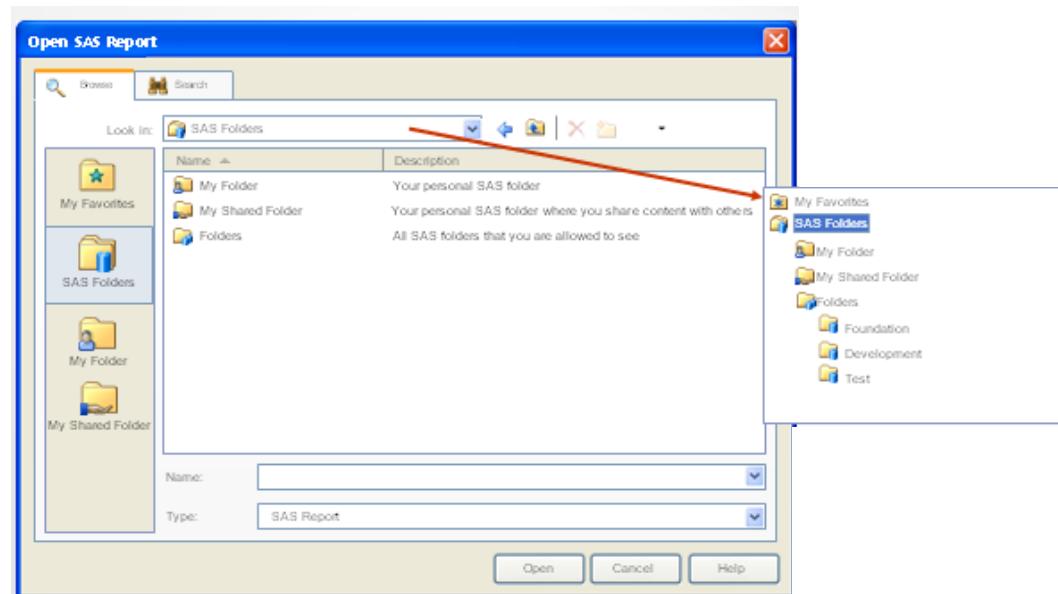
- Windows x64 (x86-64) that includes Windows Server 2003 x64, Windows XP Pro x64. In addition it will include 2007 planned releases of Windows Longhorn Server x64 and Windows Vista x64
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- Solaris on SPARC (Solaris 9, 10)
- AIX on Power (AIX 5.3)
- Solaris 10 x64 (x86-64) (Solaris 10)

Application Server Versions Are subject To Change

# SAS 9.2

## Cross Client BI Enhancements

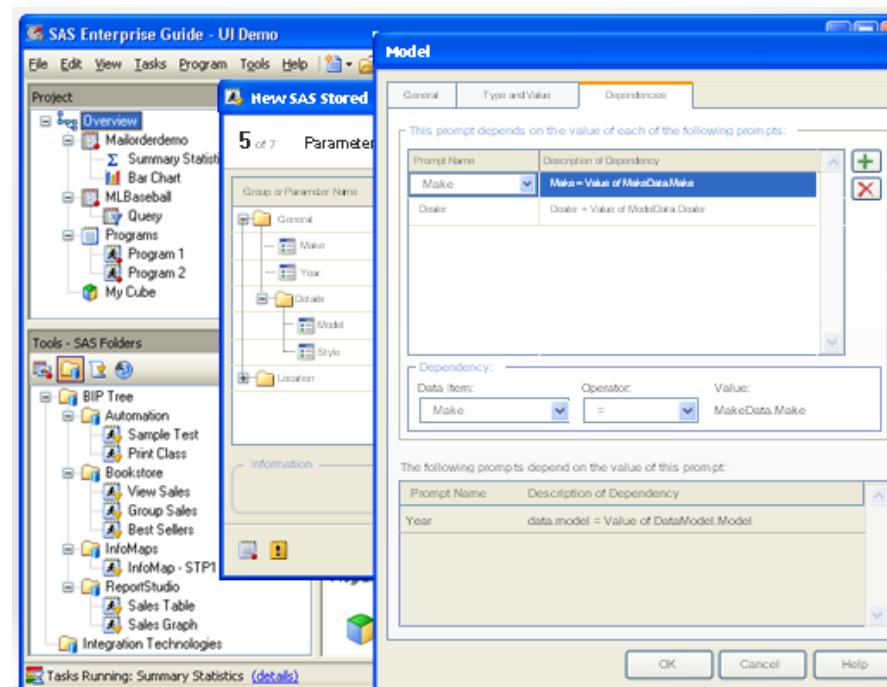
- Multiple repositories & content location independence



# SAS 9.2

## Cross Client BI Enhancements

- New shared prompting model (cascading & dynamic)

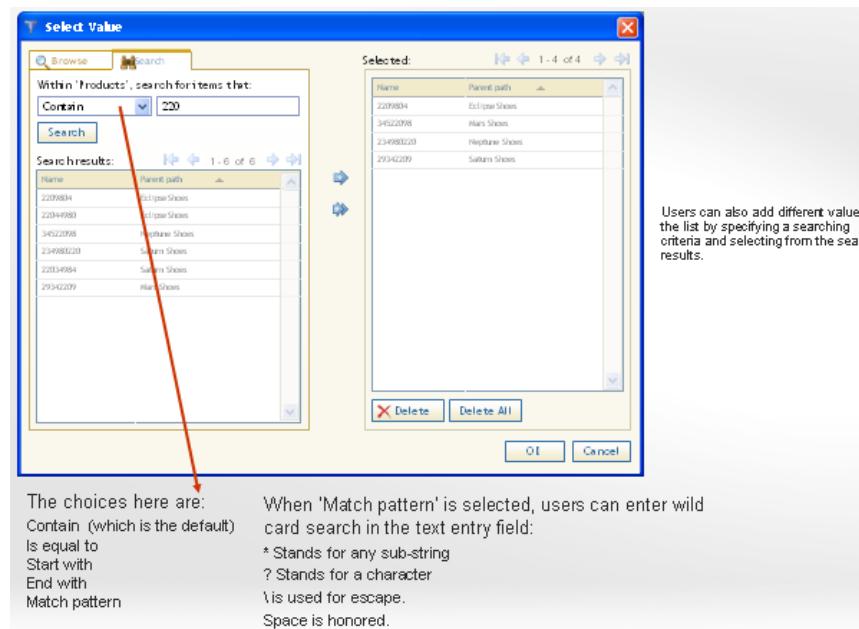


Dynamic and Cascading Prompts - Design Time

# SAS 9.2

## Cross Client BI Enhancements

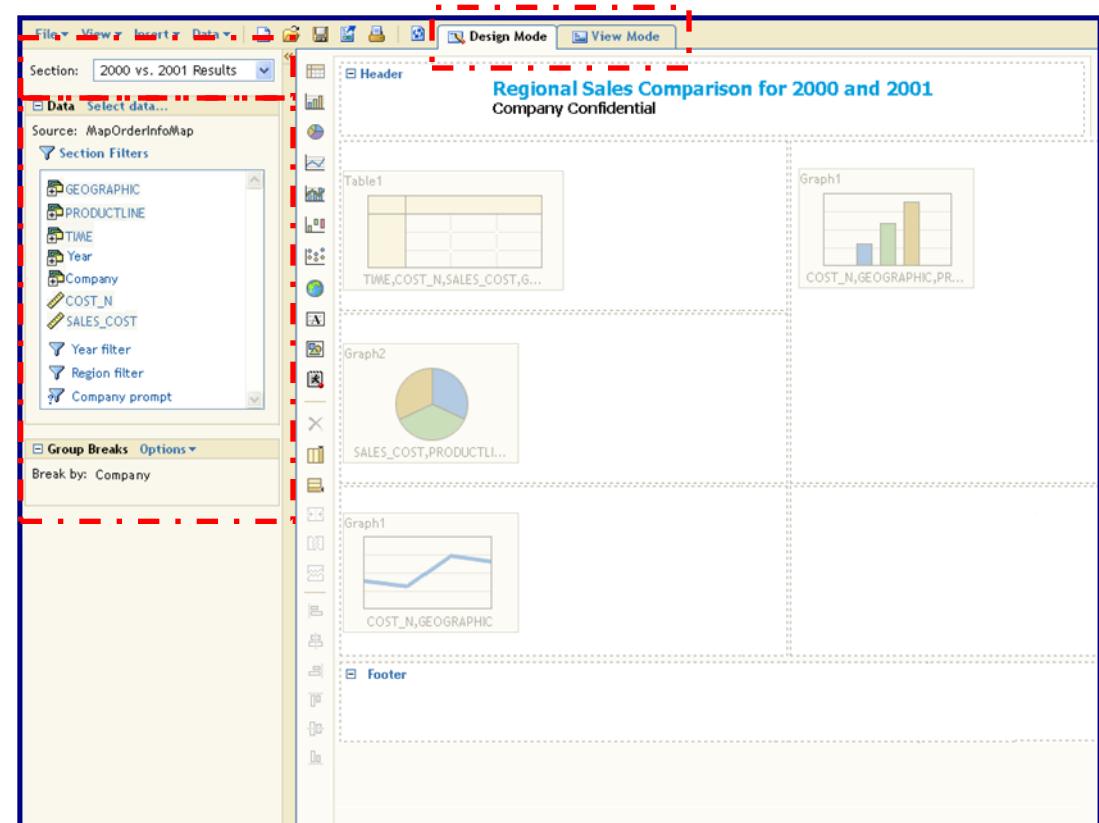
- Search in Filter Capabilities



# SAS 9.2

# SAS Web Report Studio 4.2 Enhancements

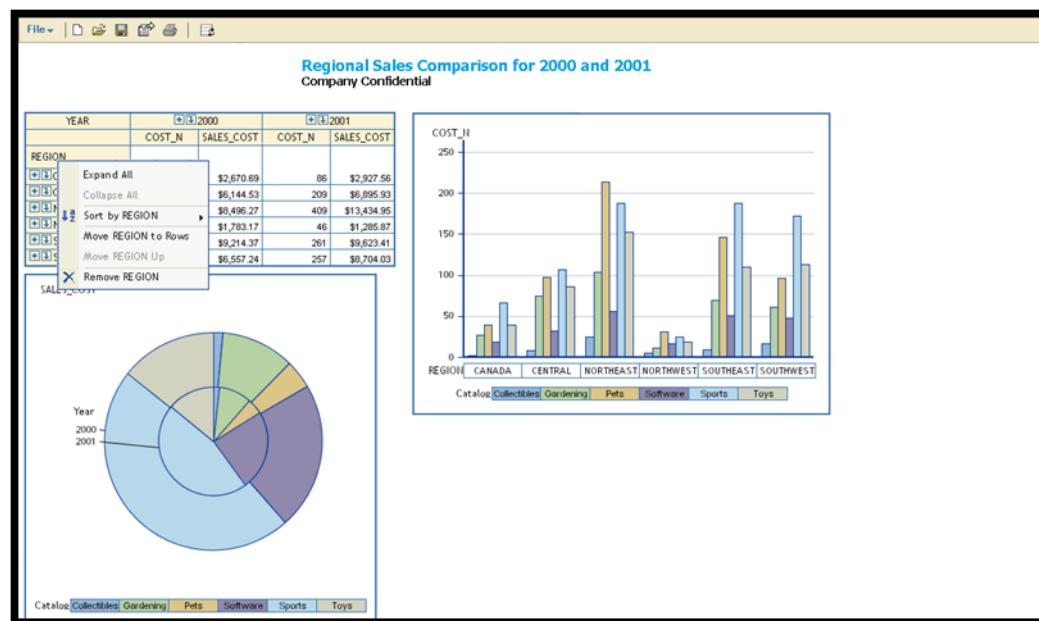
- User Interface
  - Side Navigation
    - Data Items
    - Filters
    - Groups
  - Design and View Mode
  - Sections as dropdown



# SAS 9.2

# SAS Web Report Studio 4.2 Enhancements

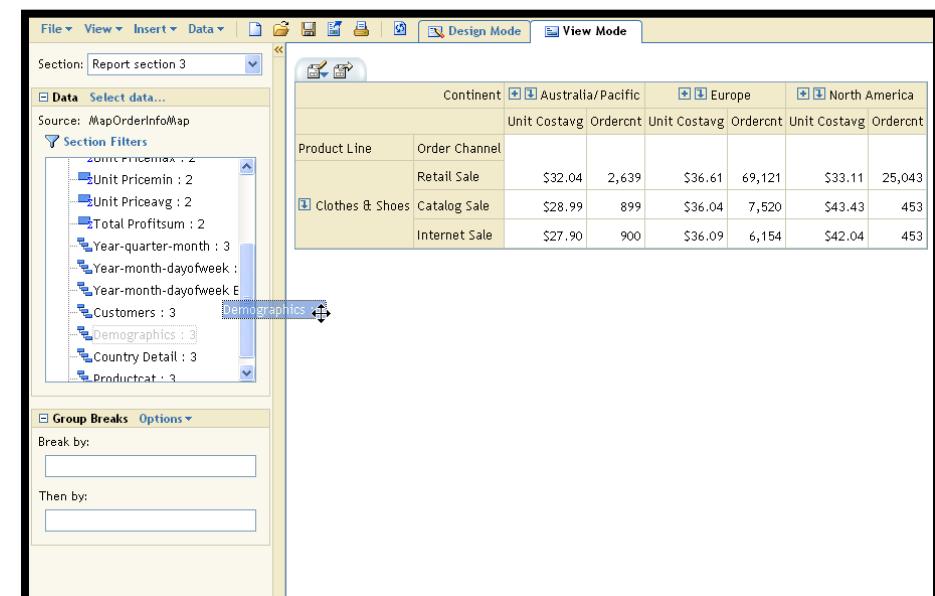
- User Interface
  - Right mouse context menus



# SAS 9.2

## SAS Web Report Studio 4.2 Enhancements

- Desktop like experience (via AJAX). Partial Web page refresh when...
  - Resizing graphs via drag & drop.
  - Dragging & dropping data items from data pane to table/graph or within table/graph.
  - Sorting, filtering/ranking, moving data items or conditionally highlighting tables and graphs.



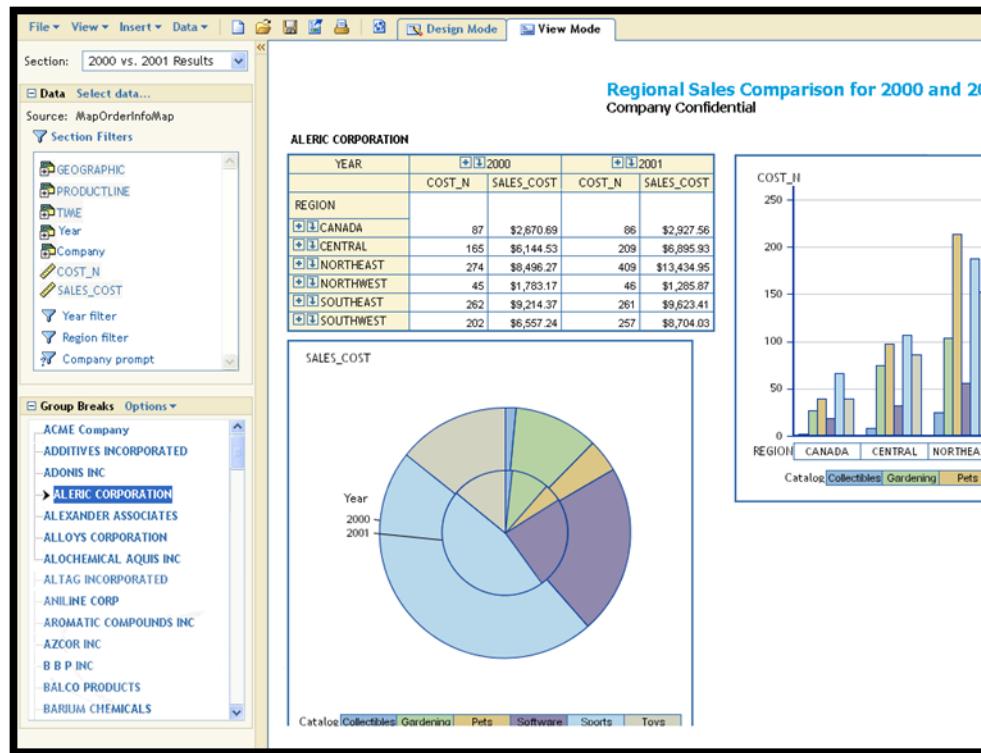
The screenshot shows the SAS Web Report Studio interface. On the left, there is a 'Data' pane containing a tree view of data sources and filters. A 'Demographics' item is highlighted. Below it are sections for 'Group Breaks' and 'Options'. On the right, there is a table report section titled 'Report section 3'. The table has columns for Continent, Australia/Pacific, Europe, North America, Unit Costavg, Ordercnt, Unit Costavg, Ordercnt, Product Line, and Order Channel. Data rows show values for Clothes & Shoes across three order channels: Retail Sale, Catalog Sale, and Internet Sale. The table includes summary rows for each continent.

Continent	Australia/Pacific	Europe	North America	Unit Costavg	Ordercnt	Unit Costavg	Ordercnt
Product Line	Unit Costavg	Ordercnt	Unit Costavg	Ordercnt	Unit Costavg	Ordercnt	
Clothes & Shoes	Retail Sale	\$32.04	2,639	\$36.61	69,121	\$33.11	25,043
	Catalog Sale	\$28.99	899	\$36.04	7,520	\$43.43	453
	Internet Sale	\$27.90	900	\$36.09	6,154	\$42.04	453

# SAS 9.2

# SAS Web Report Studio 4.2 Enhancements

- Select data from navigation pane



# SAS 9.2

# SAS Web Report Studio 4.2 Enhancements

- Report Linking
  - Link from ESRI spatial map support with multi-select parameter passing
  - Link directly to a stored process
  - Link to a specific report section

# SAS 9.2

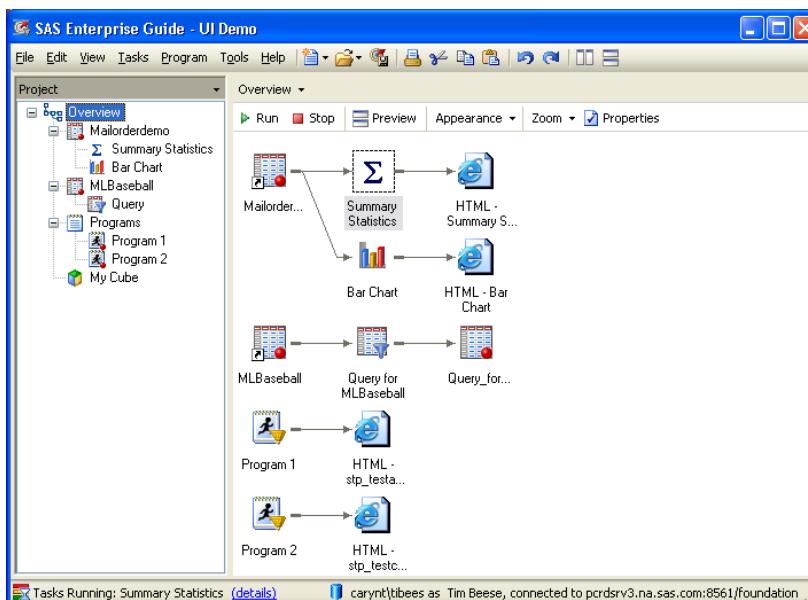
## SAS Web Report Studio 4.2 Enhancements

- OLAP Aggregations (Also in SAS Web OLAP Viewer for Java 4.2)
  - Totals and subtotals enhancements
  - Display parent values (based on security) or visual totals
- Show % of visual totals or parent values
- Support for secure parent values

# SAS 9.2

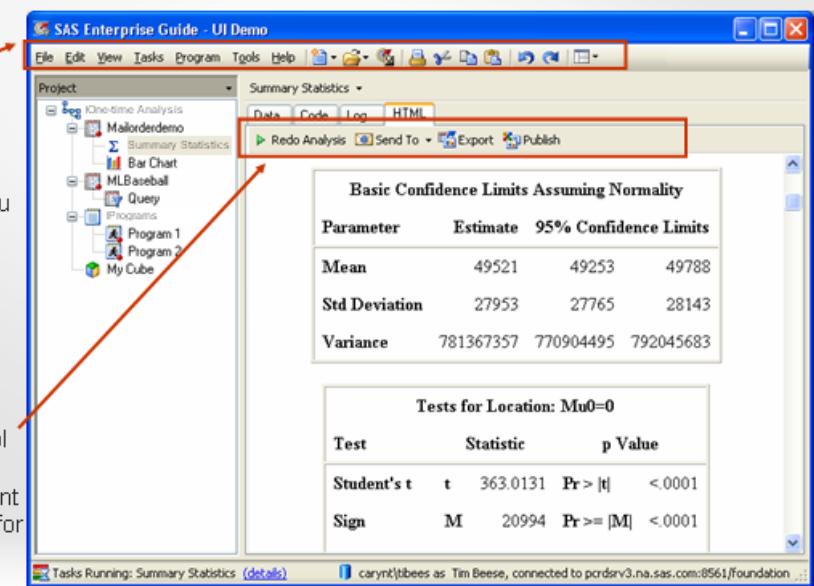
## SAS Enterprise Guide 4.2 Enhancements

- Updated Enterprise Guide UI
  - Contextual toolbars and simplified menus



Top-level menus have been reduced and combined with a basic toolbar. (The Tasks menu combines Code, Data, Describe, Graph, Analyze, OLAP; also, the Window menu is eliminated.)

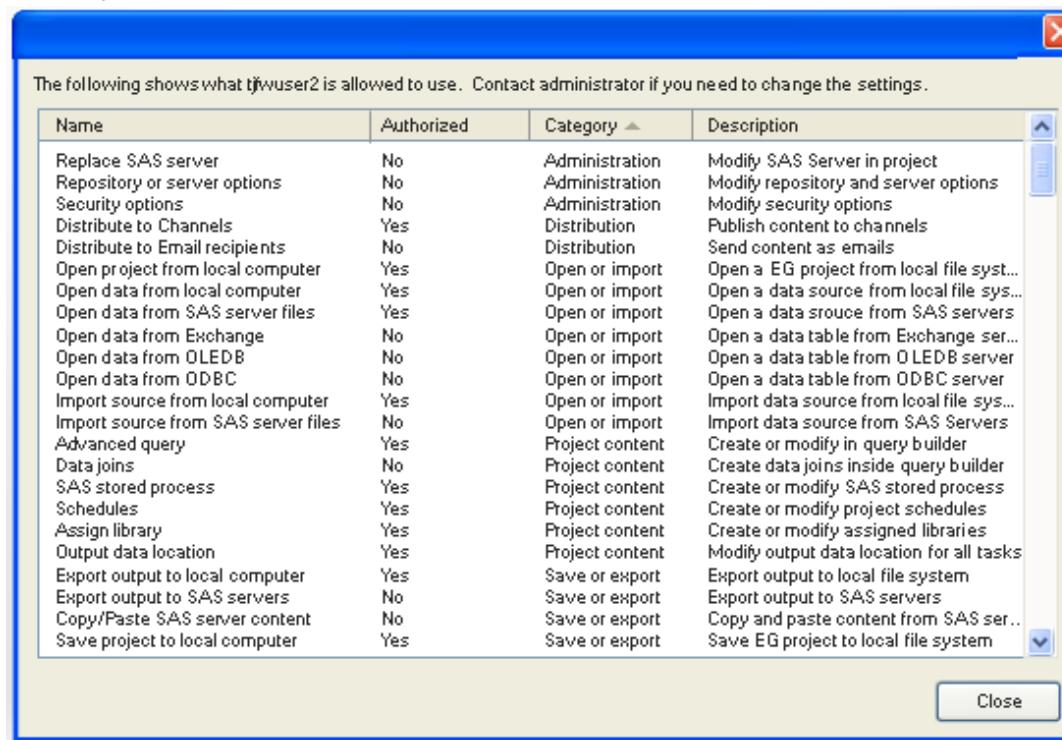
A contextual tool bar appears inside the content area optimized for the object being viewed.



# SAS 9.2

## SAS Enterprise Guide 4.2 Enhancements

- Updated Enterprise Guide UI
  - Centrally control user access to capabilities



The following shows what tjwuser2 is allowed to use. Contact administrator if you need to change the settings.

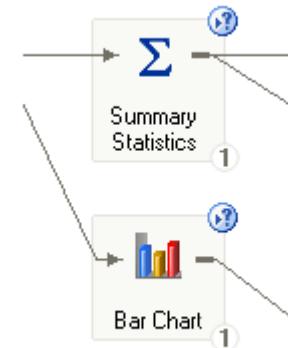
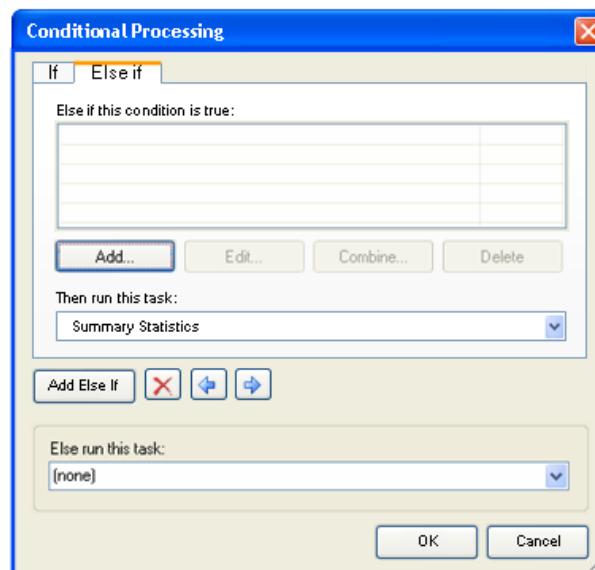
Name	Authorized	Category	Description
Replace SAS server	No	Administration	Modify SAS Server in project
Repository or server options	No	Administration	Modify repository and server options
Security options	No	Administration	Modify security options
Distribute to Channels	Yes	Distribution	Publish content to channels
Distribute to Email recipients	No	Distribution	Send content as emails
Open project from local computer	Yes	Open or import	Open a EG project from local file syst...
Open data from local computer	Yes	Open or import	Open a data source from local file sys...
Open data from SAS server files	Yes	Open or import	Open a data source from SAS servers
Open data from Exchange	No	Open or import	Open a data table from Exchange ser...
Open data from OLEDB	No	Open or import	Open a data table from OLEDB server
Open data from ODBC	No	Open or import	Open a data table from ODBC server
Import source from local computer	Yes	Open or import	Import data source from local file sys...
Import source from SAS server files	No	Open or import	Import data source from SAS Servers
Advanced query	Yes	Project content	Create or modify in query builder
Data joins	No	Project content	Create data joins inside query builder
SAS stored process	Yes	Project content	Create or modify SAS stored process
Schedules	Yes	Project content	Create or modify project schedules
Assign library	Yes	Project content	Create or modify assigned libraries
Output data location	Yes	Project content	Modify output data location for all tasks
Export output to local computer	Yes	Save or export	Export output to local file system
Export output to SAS servers	No	Save or export	Export output to SAS servers
Copy/Paste SAS server content	No	Save or export	Copy and paste content from SAS ser...
Save project to local computer	Yes	Save or export	Save EG project to local file system

**Close**

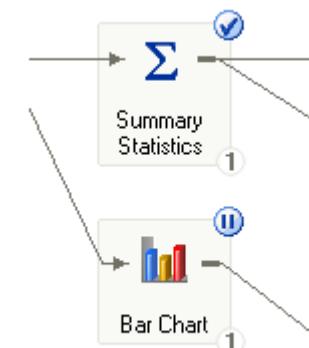
# SAS 9.2

## SAS Enterprise Guide 4.2 Enhancements

- Conditional Processing
  - Take different routes based on rules and graphically display path taken



Conditional logic  
setup but not run

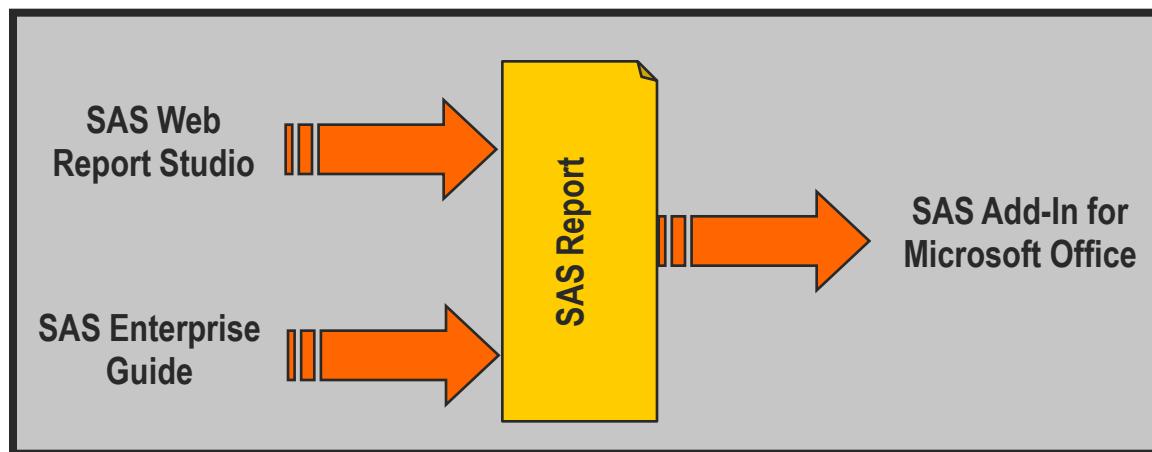


Icons show path taken  
from current run

# SAS 9.2

## SAS Add-In for Microsoft Office 4.2 Enhancements

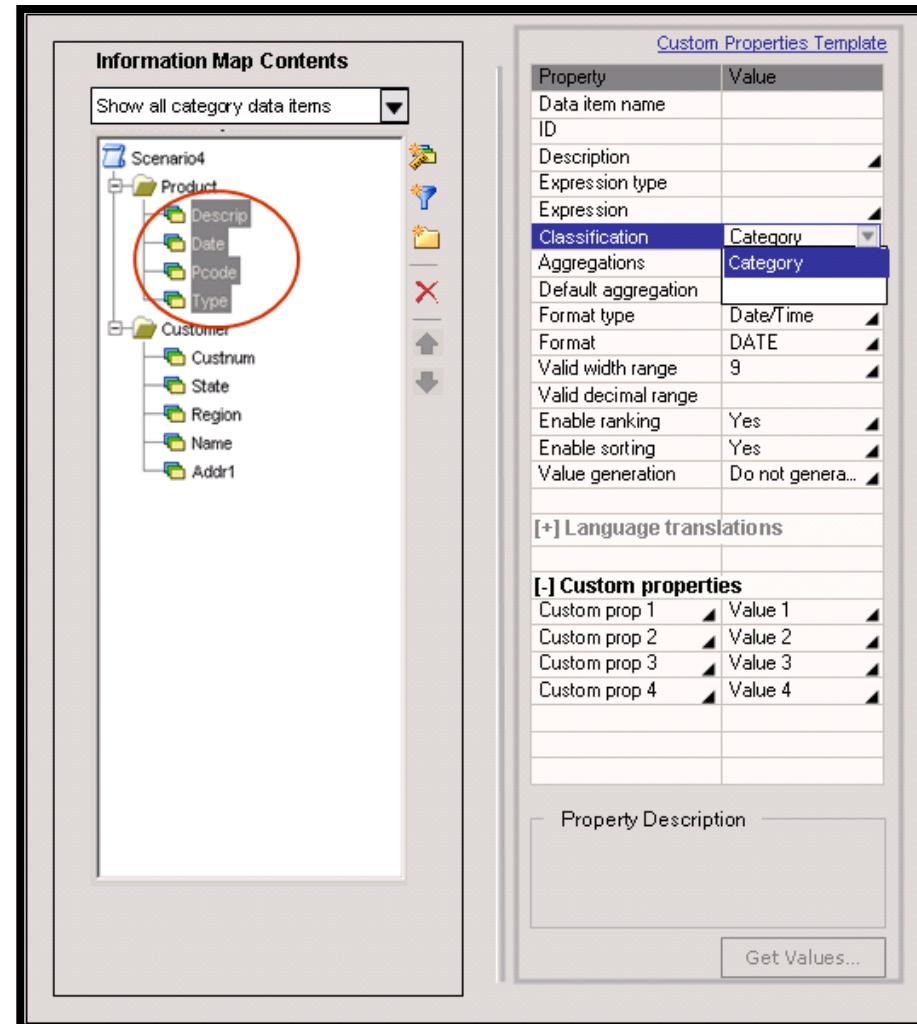
- Add-In for Microsoft Office - Open SAS Reports authored from WRS or EG



# SAS 9.2

# SAS Information Map Studio 4.2

- Dynamic and Cascading Prompts
- Bulk edit for Data Items
  - Multi-select data items
  - Relevant changes to Properties window based on user selection
  - Allows changing *common editable values*



# SAS 9.2

## SAS Information Delivery Portal

- BI Portlets to render WRS reports & stored process results
- New navigator portlet for all content types
  - Configurable to expose specific content types

# QUESTIONS?