

Novedades versión SAS 9.3

Evolution ready for innovation!



THE
POWER
TO KNOW®

Agenda

- SAS
- Highlights of Enhancements under SAS 9.3
- Moving to SAS 9.3

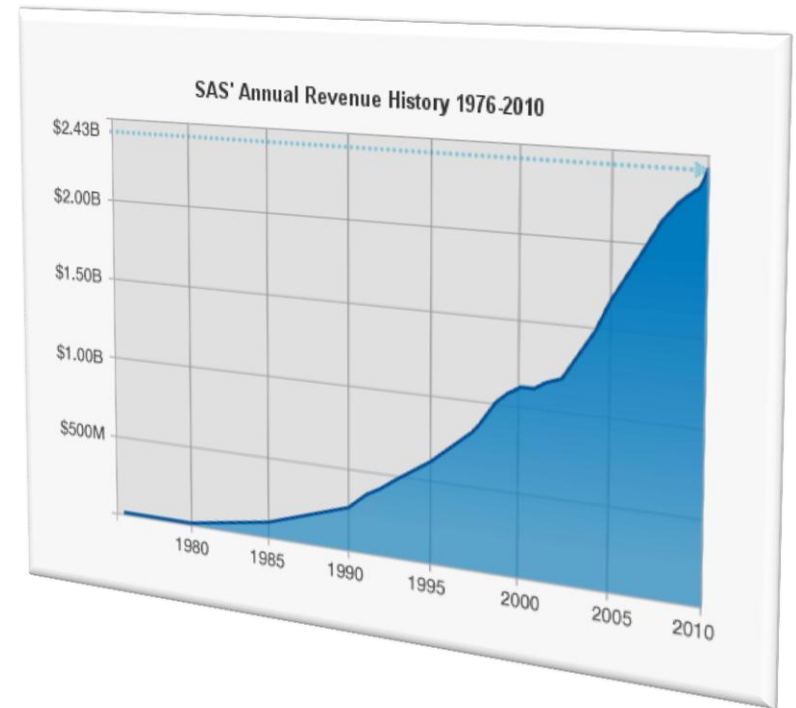


THE
POWER
TO KNOW®

What Why How

35 years...

FORTUNE
100 BEST
COMPANIES
TO WORK FOR 2010



What

ANTICIPATE OPPORTUNITY
EMPOWER ACTION
DRIVE IMPACT



Why

COMMITMENT TO CUSTOMERS
PEOPLE & SKILLS
TECHNOLOGY

Over 50,000 customer sites in 127 countries

More than 12,000 SAS employees in +400 offices

Offices in Barcelona and Madrid:
Technical Support, Training, Consulting

What

ANTICIPATE OPPORTUNITY
EMPOWER ACTION
DRIVE IMPACT

Why

COMMITMENT TO CUSTOMERS
PEOPLE & SKILLS
TECHNOLOGY

How

BUSINESS SOLUTIONS
INFORMATION MANAGEMENT
ANALYTICS
REPORTING

BUSINESS SOLUTIONS



INFORMATION MANAGEMENT



ANALYTICS



REPORTING





INFORMES ESTANDARD
INFORME



OBJETIVOS
OPTIMIZACIÓN

SAS 9.3 drivers

- Continued customer focus
 - The SAS 9.3 release is a direct response to listening to our customers and understanding their business issues.
- “Big Data” Management
 - Enhancements scalability (in grid computing & in-database analytics), new data management functionality, and enhanced data governance and stewardship.
- SAS for “Big Analytics”
 - Best in Class gets even better with new algorithms & functionality that takes users & organizations to the next level of analytical insight.

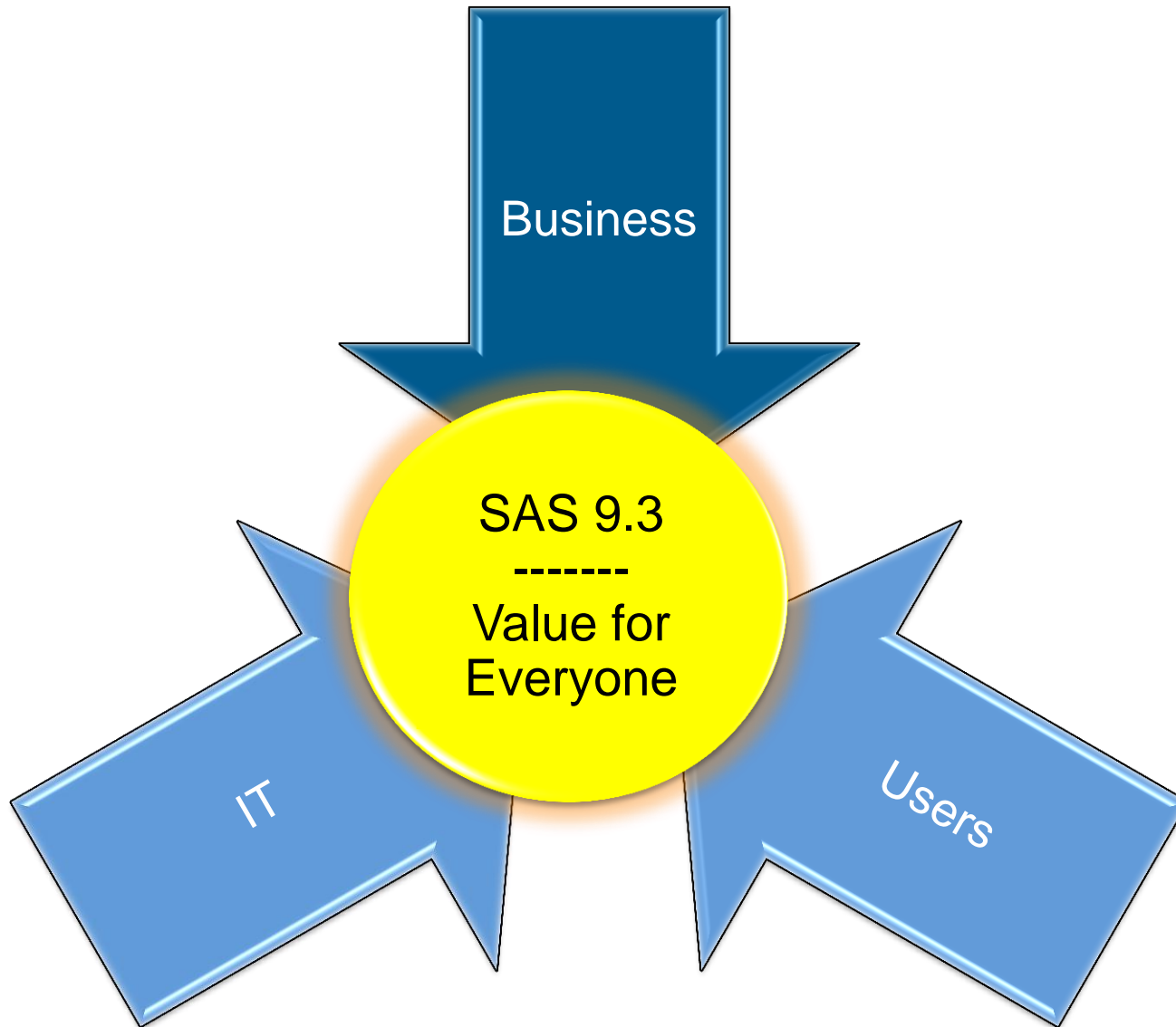
Evolution ready for innovation!

Productivity, Enablement, Performance, Scalability



- Products
- Solutions
- Overall SAS Environment

- Data Governance & Management
- Big Data
- Big Analytics
- New Business Challenges



For the users interacting daily with SAS software



- SAS 9.3 delivers:
 - Thousands of new capabilities with many surfaced through improved user interfaces
 - Enhancements to existing working methods improving **productivity** and allowing reduction in backlog and more responsiveness
 - Extended and new capabilities that **enable** you to tackle problems previously difficult/impossible to attack in a timely manner

For the IT department supporting SAS deployments



- SAS 9.3 delivers:
 - Significant feature enhancements for better deployment, configuration, monitoring and general administration of the SAS environment
 - Extensive **scalability** and high **performance** capability, ready for expansion for the next complex set of business opportunities
 - An agile environment to handle Big Data and Big Analytics
 - A continued evolution on the huge strides taken with 9.2 and a direct path from 9.1.3 and 9.2 to the most modern SAS environment
 - An environment ready for the next wave of SAS Business Solutions

For the forward looking business wanting the next competitive breakthrough



- SAS 9.3 delivers:
 - An unconstrained competitive weapon with inbuilt **scalability & performance** to support today's & tomorrow's business needs
 - An environment ready to handle next generation opportunities coming with Big Data and Big Analytics
 - **Productivity** enhancements and capabilities to **enable** the solving of problems in uncharted territory
 - Increased efficiency for most tasks being undertaken today
 - An environment to enable insight and drive actions with unprecedented support for innovation and optimization.
 - Ways for your organization to anticipate opportunities, empower action, and drive impact

Business

IT

Scalability

Predictable scalability within the SAS platform to handle evolving business requirements

Performance

Increased speed in all areas of the platform and our solutions

Business

Business

Users

Enablement

New capabilities to address a breed of business problems that were difficult or not possible previously

Productivity

New capabilities that speed up tasks being undertaken today by people using/managing the SAS environment

Business

Scalability & Performance

Grid

- Enhanced management and monitoring
- Increased support for high availability
- Better workload management (Stored Process, OLAP and Pooled Workspace server processes can be executed and managed on the SAS Grid)

In-Database

- More Native SQL generation and pushdown
- Updated Scoring Accelerators
- Analytics Accelerator

High Performance Analytics

- Execute complex analytical computations and data in a parallel, shared in-memory environment
- Teradata and EMC (Greenplum)

Product Enhancements

- Better utilization of native math libraries on many platforms delivers superior performance
- Enhancements made to many products e.g:
 - OR solvers, BI Dashboard

Enablement

Data Management

- Greater native integration into RDBMS / Appliances
- New Transformations: Compare Tables, Type 1 SCD etc
- Versioning and automated job deployment support

Analytics

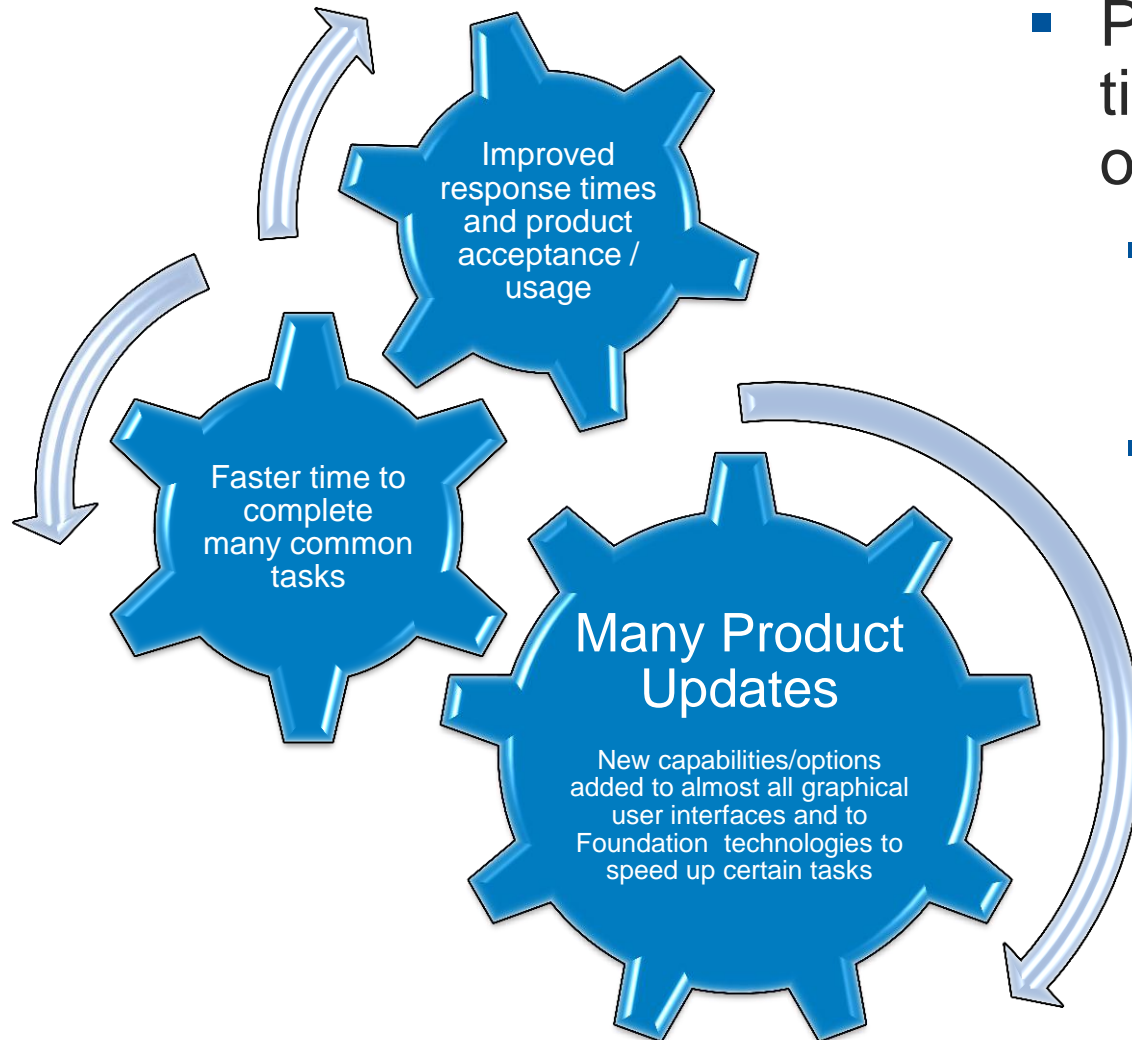
- Some Highlights
 - New analytic algorithms
 - Rate Making and Survival Analysis
 - Ensemble/Combination Modeling
 - More Languages in Text Analytics

Environment Management

- Metadata search capabilities and favorites “bookmarks” within SAS Management Console.
- Metadata promotion supports technical metadata, such as SAS servers, users, groups/roles, and ACTs.
- Support for additional Unix authentication methods, such as Kerberos

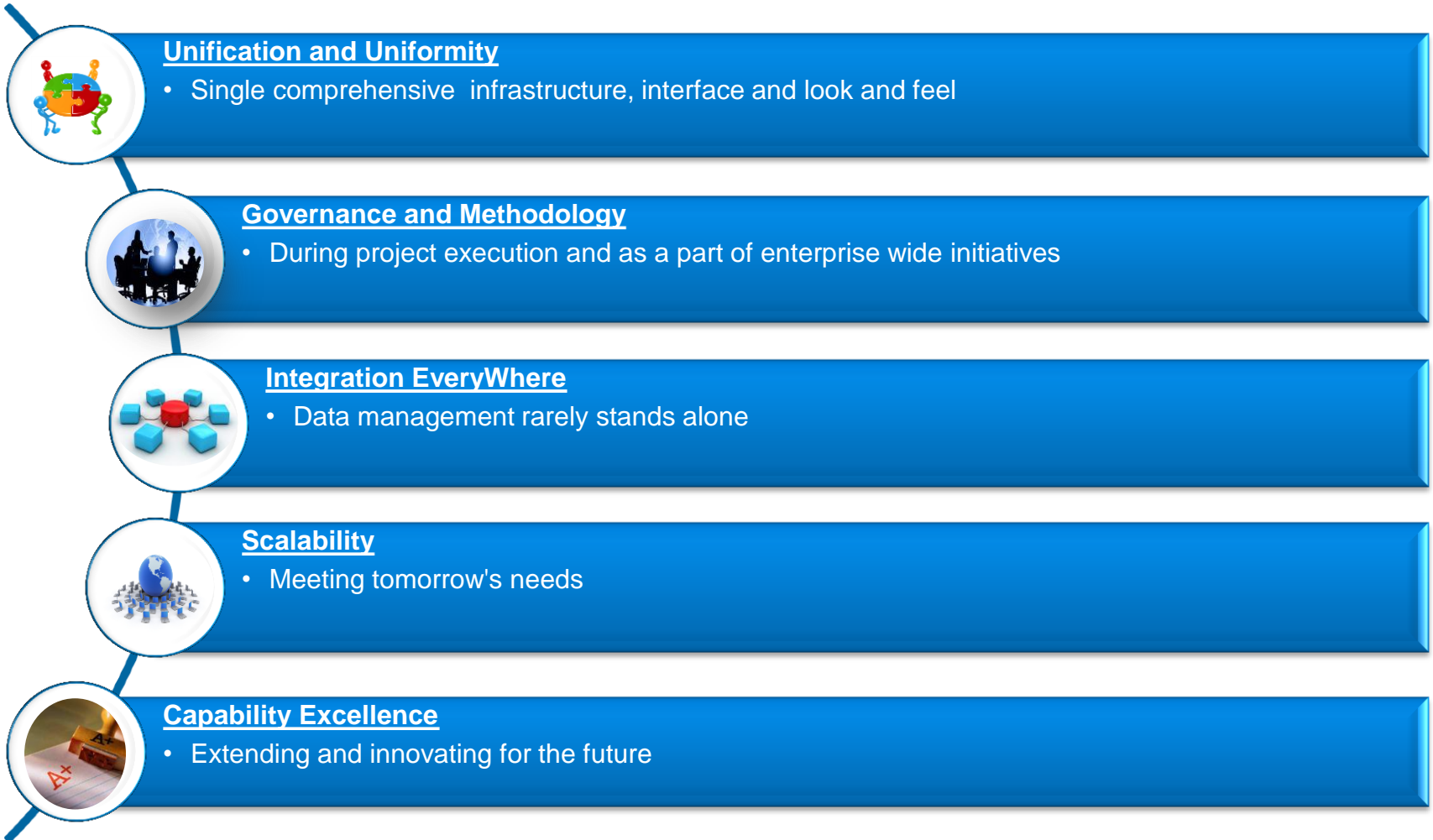
Productivity...

WHY is it important?



- Productivity drives direct time savings for the users of SAS technology
 - Frees resources to work on other projects increasing their value and responsiveness
 - Helps in using SAS software assets making them more widely adopted and therefore delivering more organizational value

On-going themes for SAS Data Management



SAS 9.3 - Data Management



Expanded SAS DI Studio support for MPP databases:
Greenplum, AsterData nCluster, Sybase IQ



In-Database Processing (ELT SQL Pushdown) - Optimized SQL Set Operator Transform – Supports UNION, UNION ALL, INTERSECT, EXCEPT, OUTER UNION

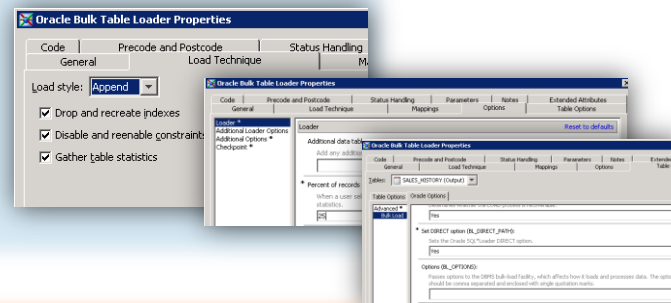
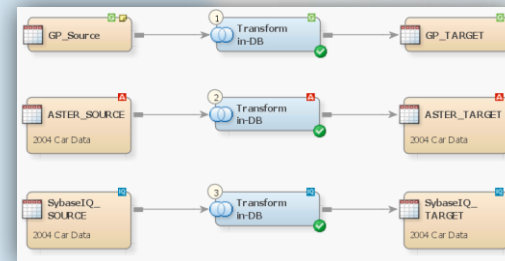


New Oracle Bulk Table Loader

Expression builder enhanced to list more native DBMS functions, including:

- Teradata 13, Oracle, DB2UDB 8.1, SQL Server, MySQL, and ODBC

New wizard enables you to extend the function list with your own User Defined Functions



- Better utilize database capabilities
- More flexibility and agility to choose between ETL and ELT
- Reduced data movement, and faster process times using existing investments

SAS 9.3 - Data Management



Version Control Integration

- Integration with Subversion and CVS with common version control features like archival, differencing, and rollback

Reporting on Batch Execution

- Ability to capture and analyze information on deployed jobs such as: Jobs, Steps, Warnings, Errors, and Job Statistics
- Including CPU, Memory, I/O, # of records processed, etc in a historical view

Automated of the Job Deployment Process

- Use common scripting languages to deploy DI Studio jobs. Allows deployment of jobs to be automated
- Includes the ability to deploy multiple objects and includes command line scheduling options

Enhanced SAS Code Importer

- Support for expansion of SAS macros, analyze only feature, ability to detect collisions plus improved logging and error checking

New Transformations

- New SCD Type 1 Loader, supports both MERGE and HASH techniques
- New Compare Tables transform compares two data sources and detect changes in data.

Metadata and Manageability

- Metadata Search tool
- Column Metadata Standardization Wizard

- Improved manageability of the Data Management environment
- Increased transparency into the Data Management environment

On-going themes for SAS Analytics



Expansion

- Continued investment in new analytic areas to solve next-generation business problems



Democratization

- Making analytics more accessible to more users



Industrialization

- Analytic lifecycle processes, monitoring and appropriate methodologies



Scalability and High Performance

- Pushing the envelope on performance of analytics and the ability to handle large amounts of data



Interoperability

- Into business processes, into reporting clients, into offices and within databases



Organizational Competency

- How to organize analytical competency for maximum success

SAS 9.3 – Analytics



SAS Enterprise Miner 7.1

- Survival data mining for time dependent outcomes
- Rate making in Insurance (claims, severity, and pure premium)
- Optimal binning with constraints for credit score carding
- In-database expansions for statistical transformations and modeling
- Time series data mining tools (Experimental)
- Support for Support Vector Machines (Experimental)



SAS Model Manager 3.1

- Workflow to replace lifecycle templates and enable automated and collaborative model import, comparison, validation, scoring, monitoring and retraining
- Model retraining in MM
- Model management for additional types of models including R models



SAS Forecast Server 4.1 / High Performance Forecasting 4.1

- Enhancements to filtering and modeling functionality
- Support for combination/ensemble models
- Support for rolling simulations
- Addition of custom time intervals
- PROC HPFTEMPRECON for temporal reconciliation (“benchmarking”) of multiple time series
- Support for roles in SAS Forecast Studio



- Enables new business capabilities
- Provides governance processes for model management
- Brings industry best practices to the hands of the practitioners

SAS 9.3 – Analytics



SAS/STAT 9.3

- New FMM procedure (experimental) for finite mixture modeling
- Shared frailty models in PHREG
- Expanded capabilities for Bayesian analysis including the addition of a RANDOM statement and multivariate priors in MCMC
- Production SURVEYPHREG procedure
- New model diagnostics in NLIN
- GRAPH license no longer required for ODS Graphics

SAS/ETS 9.3

- New procedure for fitting copula distributions
- New procedure for statespace modeling
- Automatic variable selection for COUNTREG procedure
- The SEVERITY procedure is now production and ships with added features and changes to the syntax
- Additional / improved ODS Graphics plots

SAS/OR 9.3

- Optimization
 - New network simplex linear programming algorithm
 - Crossover feature for interior-point linear programming solver (experimental)
 - Improvements to nonlinear solvers and introduction of a multi-start method for nonlinear programming
 - Performance improvements for mixed integer programming solver
- Simulation
 - Using data to drive models – empirical distributions, nonhomogeneous Poisson processes
 - Improved usability to simplify navigation of large models
 - Support for Windows 64 and remote SAS servers
 - Automatic input distribution fitting using JMP for Simulation Studio

- Continued investment in core analytical technologies

SAS 9.3 – Text Analytics



SAS Text Miner

- Enhanced Language Support – Now supporting 28 languages
- New Text Import capabilities for sourcing file system and web data
- Reuse Synonym data sets and other usability enhancements



SAS Enterprise Content Categorization

- Wikipedia Integration to support the generation of taxonomies
- Pre-Built out of the box industry taxonomies
- New graphical reports for precision and recall

SAS Sentiment Analysis

- Enhanced language support – Now supporting 28 languages
- Enhanced rule building, editing, verification and operators
- Interactively add new concepts by subject matter experts



On-going themes for SAS Reporting



Interface Usability and Look and Feel

- Delivering increased productivity, "sexy" interfaces and increasing user adoption rates



Ubiquitous Entry Points

- Delivering the same information through as many entry points as possible to increase utilization



Managed and Ad Hoc Reporting and Analysis

- One infrastructure to support all enterprise reporting and analysis needs



Collaboration /Interoperability

- Seamless information exchange, increased integration with social media and workflow



High-Performance Computing

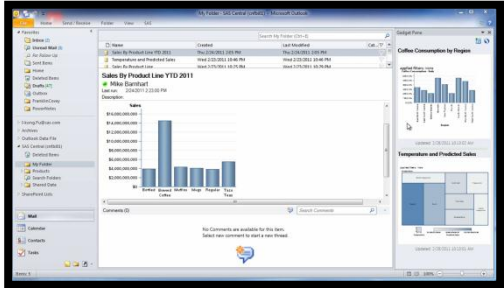
- Reporting infrastructure and clients designed to handle high data volumes

SAS 9.3 – Reporting



- Initial 9.3 release contains a 4.31 release
 - Functionally equivalent to the 4.3 release on top of SAS 9.3
 - Includes numerous performance enhancements
- Next BI release
 - SAS® Add-In for Microsoft Office 5.1
 - SAS® Enterprise Guide 5.1
 - New Client: SAS® Visual Analytics Explorer
 - Native mobile BI reporting capabilities for Android and iPad

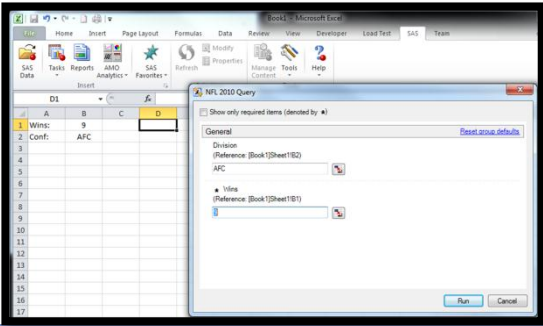
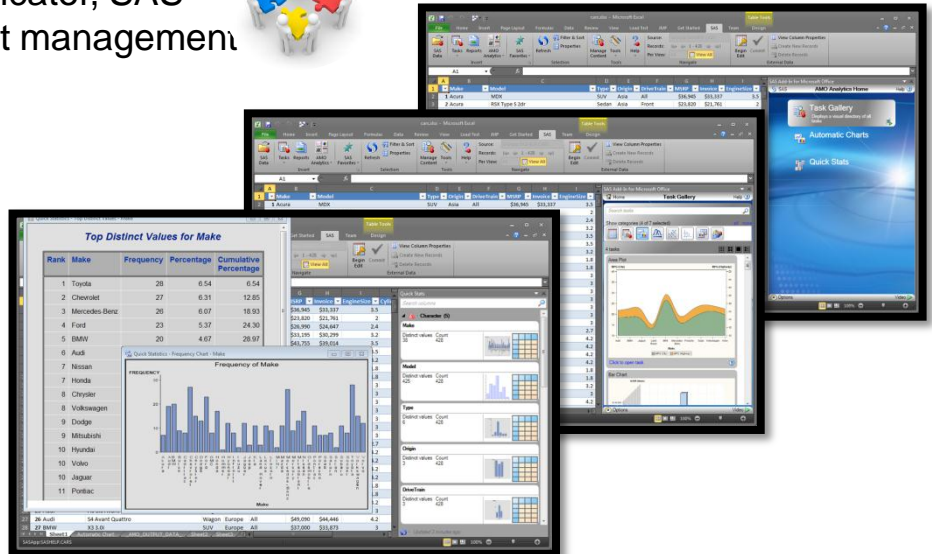
SAS 9.3 – Reporting SAS Add-In for Microsoft Office 5.1



Collaboration: Microsoft communicator, SAS comment management



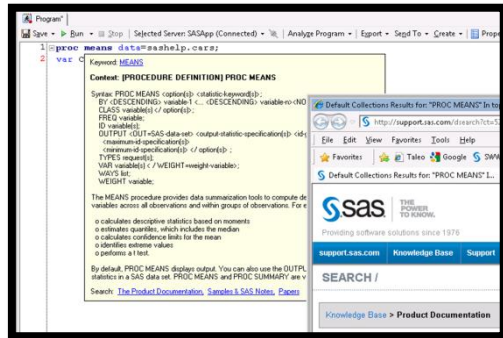
New navigation pane to find tasks. Includes a task gallery with sample task output, automatic/native chart capabilities and access to quick descriptive statistics about the data.



Prompting directly using cell values in Microsoft Excel



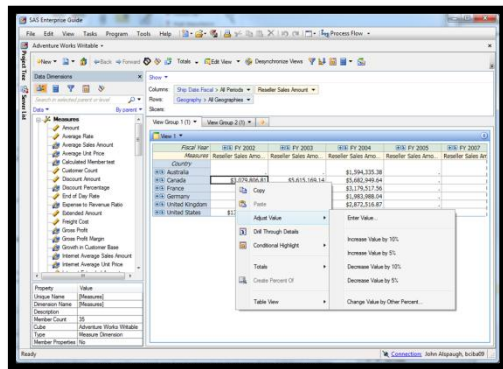
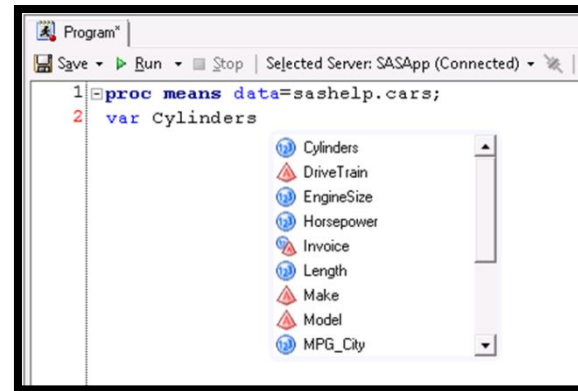
SAS 9.3 – Reporting SAS Enterprise Guide 5.1



Linkage to Online Help & Samples directly from EG hover over Syntax help



Auto completion extended to also return variables in data when metadata is in use



Write Back Capability when using MS SQL Analysis Server



SAS 9.3 – Environment Management Client Tier

Targeted at desktop market, thick clients

- **Supported: (editions targeted for use by businesses)**
 - Windows XP Pro SP2
 - Windows XP Pro x64, 32-bit compatibility mode
 - Windows Vista
 - Windows Vista x64, 32-bit compatibility mode
 - Windows 7
 - Windows 7 x64, 32-bit compatibility mode

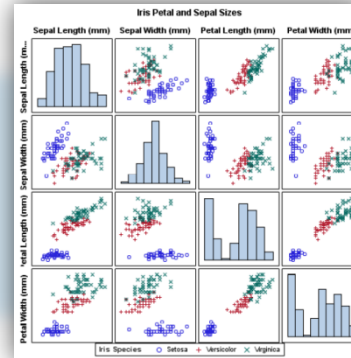


SAS 9.3 – What about BASE SAS?



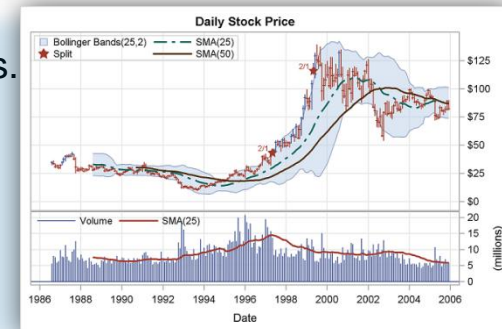
High Quality Graphics now included in BASE SAS

- ODS Statistical Graphics
- The SG Family of Procedures
- The GTL (Graphical Template Language)
- The ODS Graphics Designer
- The ODS Graphics Editor.



SAS Windowing Environment defaults to HTML output and ODS Graphics.

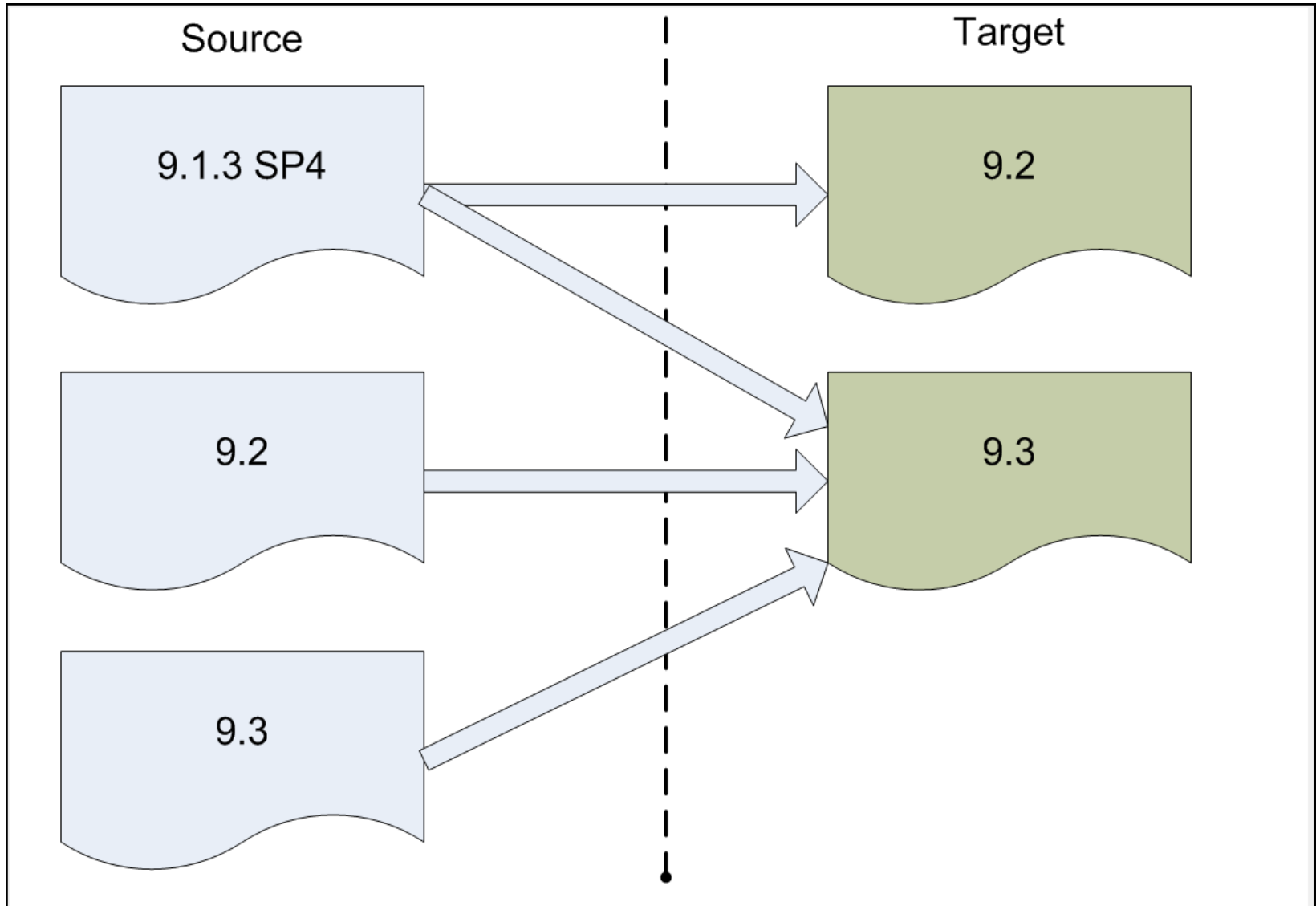
- ODS Graphics is enabled by default
- HTML is default destination (vs LISTING)
- Graphs are integrated with tables, and all output is displayed in the same HTML file
 - By default, deliver polished, high-quality graphics.
 - For compatibility, provide simple path for choosing “Pre-9.3” graphics options.



- PROC GROOVY enables SAS code to execute Groovy code on the Java Virtual Machine.

```
/*-----  
PROC Groovy example: This example shows  
how to export values from Groovy as SAS  
macros.  
-----*/  
proc groovy classpath=cp;  
  eval "exports.fname = 'Darren'";  
  eval "binding.exports.lname = 'Key'";  
  eval "exports.put('state', 'NC')";  
quit;  
  
data _NULL_;  
  put "----> &fname &lname: &state";  
run;
```

Migration Paths: 3 paths to 9.3



9.1.3 End of Life

- Support status drops to Level B on 31 Dec 2011
 - 9.1 was released in 2003, 9.1.3 in 2004.
- Major Improvements since then enabling much greater reliability, & productivity
- 9.1.3 Clients do NOT support Windows 7

Training SAS 2011

+50 cursos

- Cursos Públicos
- Formación personalizada
 - On-site
 - Temarios
- SAS e-learning / Live Web classes
- Cursos Business Knowledge Series
- Programas de Certificación SAS

<http://www.sas.com/offices/europe/spain/training/index.html>

Technology Update SAS® 9.3

¿Quiere conocer las principales novedades de SAS en una mañana?

Información **Agenda** Localización **Regístrese Ahora**

En este evento nos centraremos especialmente en las nuevas capacidades disponibles en SAS®9.3. SAS®9.3 supone una evolución de los productos y entorno SAS actuales, y una preparación para el soporte de futuras innovaciones mediante mejoras en gobierno de datos y en analítica avanzada para proporcionar respuestas a retos de negocio especialmente para grandes volúmenes de datos. Toda esta evolución en capacitación y productividad de usuarios, y escalabilidad y rendimiento técnico ha de proporcionar un gran valor a las organizaciones

De 9:00 a 13:00 se proporcionará una visión de las nuevas capacidades de SAS®9.3 para gestionar la información en los siguientes ámbitos principales:

- Gestión de Datos
- Gestión del Entorno SAS
- Analítica Avanzada
- Reporting

Durante la pausa de café y aperitivo, se dispondrá de la oportunidad de intercambiar consultas y experiencias con los asistentes del evento y el personal de SAS. Adicionalmente, se mostrarán ejemplos específicos de algunas de estas novedades.

Regístrese Ahora



Regístrese Ahora

**Jueves 6 de Octubre de 2011
de 9:00 a 13:00 horas**

SAS Delegación Barcelona
C/ Josep Pla, 2.
Torres Diagonal Litoral
Edifici B3 - PI.5

S.R.C.: 91 200 73 03
eventosbcn@spn.sas.com

Asista y participe en el SORTEO de un fantástico Ipad® 2





¿Preguntas?

Gracias por su atención.

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