



**THE
POWER
TO KNOW[®]**

SAS[®] 9.2 Benefits Overview

May 2010

SAS Caribbean

SAS[®] 9.2 – You should have plenty to talk about!

1. Performance Improvements
2. Foundation Feature Improvements
3. Better ODS and Graphics Control
4. New & Improved Server Functionality
5. New & Improved BI User Interfaces
6. Cost/Benefits of [Not] Upgrading
7. Need More Info?

SAS[®] 9.2 – Performance Improvements

1. PROC SQL WHERE-Clause *In-database* Optimizations for SAS/Access to [RDBMS]

- a) **unPUT:** Pass-through IN clause instead of using PUT(v,<format>) SAS functions
- b) **Date functions:** Pass-through equivalent RDBMS-specific date/time functions
- c) **Constant folding/substitution** – i.e. TODAY, DATE, TIME, and DATETIME
 - Can prevent entire RDBMS table from being copied to physical SAS server/PC
 - WRS report performance may particularly benefit from these optimizations
 - May often reduce existing SQL queries from hours-to-mins or mins-to-seconds
 - May show far greater overall performance boosts than all other in-database processing efforts – even the EM / Teradata in-database modeling effort

2. PROC SQL Optimizations for SAS Data Sets

- a) **Faster value counting:** in-memory processing for SELECT ..DISTINCTs..
- b) **Faster sorts, joins & compound queries:** reduced or eliminated use of temp tables for PROC SORT, PROC SQL+ORDER BY and multi-level queries

3. *SAS Code Analyzer*: captures info about job steps, I/O, files and macros

SAS[®] 9.2 – Foundation Feature Improvements

1. Checkpoint/Restart - Program execution can now often resume with the step that did not complete when the failure occurred

2. Auditing, Monitoring & Management Enhancements:
 - a) Auditing: Log-4-SAS and improved ARM logging
 - b) Monitoring: Dynamic output control, monitor users, view dynamic stats
 - c) Management: Stop, start, pause, etc. individually identified processes

3. 15+ New Algorithms for PROC STAT, ETS, OR and QC

4. Base SAS Enhancements:
 - a) User written functions (FCMP)
 - b) New functions & formats

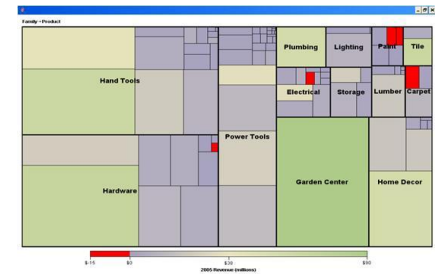
SAS® 9.2 – Better ODS and Graphics Control

1. Output Delivery System (ODS) Updates:

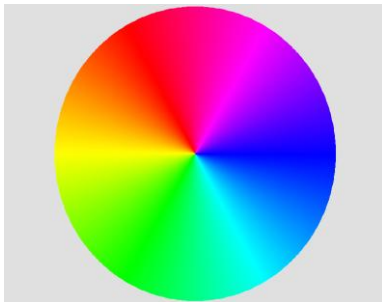
- a) Improvements to RTF and PDF output destinations
- b) Better integration with Base SAS reporting procedures
- c) Enhancements to Universal Printing and TrueType fonts

2. SAS/Graph Enhancements:

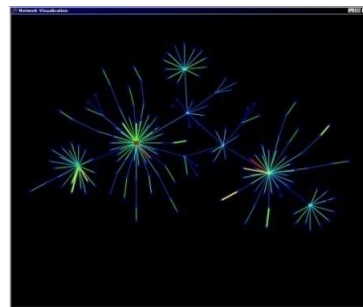
- 1. SGEEditor: Statistical Graphics Editor
- 2. New PROC SGPlot, SGScatter, SGPanel, GKPI, GTileChart
- 3. Graphics Template Language
- 4. TrueType fonts



e) PROC GTileChart



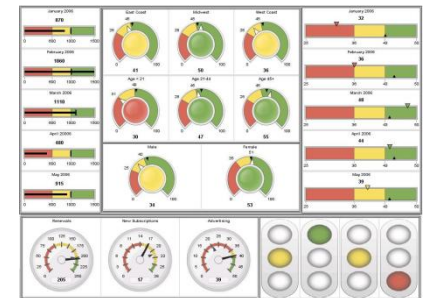
f) TrueColor support



g) Network Diagrams



h) Transparent image Backgrounds



i) PROC GKPI: EBI is not required! Put in .pdf, .html!

SAS[®] 9.2 – New & Improved Server Functionality

1. **Base SAS Engine/Server** (batch, Workspace & Stored Process servers) - already covered in *Performance Improvements* and *Foundation Services Improvements*
2. **SAS OLAP Server:**
 - a) Supports incremental cube updates
 - b) SAS functions available via MDX language syntax
 - c) Batch management via PROC OLAPOPERATE
 - d) Totals: security-based, visual-based, filter-based, percent-of-totals
3. **SAS Content Server (BI WebDav)** – Replaces Xythos!
4. **Jboss (BI)** – Replaces Tomcat (but includes Tomcat)

SAS[®] 9.2 – New & Improved BI User Interfaces

1. Common Across Many BI User Interface Clients
 - a) All will have a “4.2” release number (except EM of course, which will be 6.x)]
 - b) Improved UI consistency i.e. shared cascading/dynamic-prompt mechanisms!
 - c) AMO \leftrightarrow WRS and EG Report Interoperability
 - d) Multiple repositories, content location independence, better single-sign-on support
 - e) Dynamic roles to customize GUIs
 - f) Better OLAP / Pivot-table aggregations and OLAP prompting support
 - g) Simplified theme customization for web-interfaces
2. **AMO** - New *List Report Wizard*, better function/PROC use, limit result records, combine filters, aggregate v. detail results, pivot-table drill-through, open EG & WRS reports, etc.
3. **WRS** – desktop-like GUI (DnD, RMB menus, partial refresh, resizing, etc.), IMS filters, value search, linking / hotspot hyper-linking to ESRI, report sub-sections, Stored Processes and URLs, built-in scheduler, improved graphics & colors, ODS generated PDFs, etc.
4. **EG** – context sensitive menus/GUI, new *List Report Wizard*, new *Conditional-Logic* node, many of the same improvements as in WRS/AMO, etc.
5. **BI Dashboard** - (not needed to build gauges now) JSR-168 compliant (runs in other portals), alert support, pass parms to linked WRS reports, secure range editing, etc.

SAS[®] 9.2 – Cost/Benefits of Upgrading

1. Gains

- a) SAS 9.2 software is **“free-of-charge”** for SAS 9.1.3 customers
- b) Performance i.e. in-database processing updates: hours to minutes
- c) Features (additional algorithms, functionality, logging, process-tracking, etc.)
- d) Usability
- e) More operating system & hardware choices
- f) More modern GUIs
- g) Potential to up-sell and repackage customer software
- h) Better platform usage tracking, auditing, debugging, monitoring & management
- i) Ability to create dashboards and critical-success-factor gauges in batch / emails
- j) Better installation procedures will minimize consulting

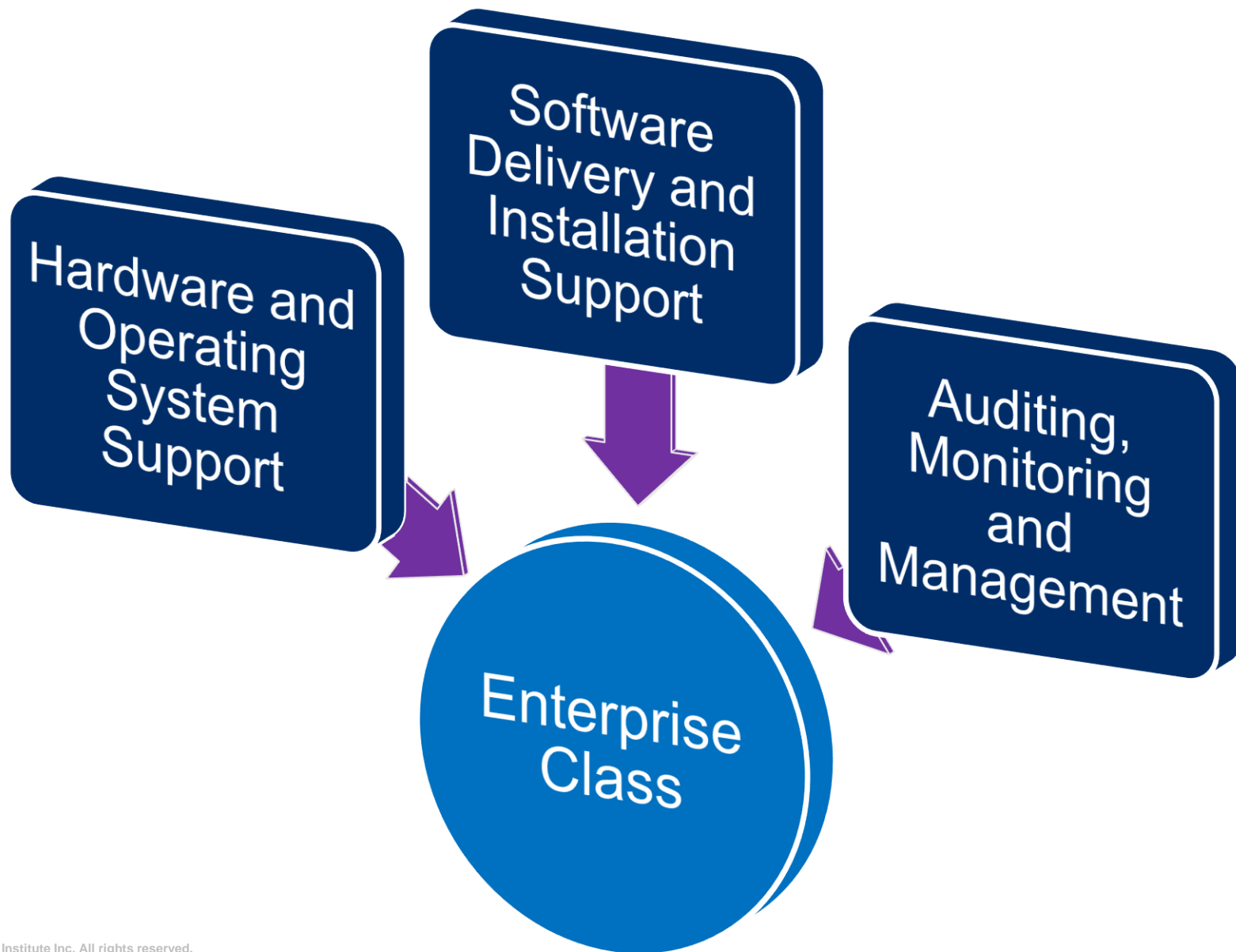
SAS® 9.2

**More Powerful
Algorithms**

**More Flexible
Models**

**Improved
Graphics**





SAS® 9.2 – Need More Info?

PRODUCTS & SOLUTIONS / SAS 9.2 SOFTWARE

Products and Solutions

- Industries
- Small to Midsize Business
- Analytics
- Business Intelligence
- Compliance
- Customer Intelligence
- Data Integration
- Financial Intelligence
- Foundation Tools
- Fraud Prevention & Detection
- Human Capital Intelligence
- IT Management
- OnDemand Solutions
- Performance Management
- Risk Management
- Supply Chain Intelligence
- Sustainability Management
- Product Index A-Z

SAS® 9.2 Software

Enabling more proactive and effective decision making

- Overview Benefits Features System Requirements

Benefits

- **Address specific problems with greater precision and confidence.** SAS 9.2 supports the entire analysis process — from data access to the point of decision — however varied or complex. A wide range of data integration techniques empowers organizations to collect, classify, process, analyze and interpret data to reveal new insights. SAS 9.2 advances the capabilities of all major SAS analytical products, including forecasting, data mining, optimization and model management. SAS Analytics provide rapid answers to key business questions, enabling decision makers to react more quickly to fast-changing conditions.
- **Improve productivity.** SAS 9.2 delivers new functionality aimed directly at speeding up the creation, processing and delivery of results. These productivity gains apply whether the user is in IT handling the installation, configuration and management of the software; a data integration or data quality steward handling data management workflow; a user building or navigating reports; or a business analyst/statistician working in the areas of data and text mining or forecasting.
- **Effectively manage the SAS environment to meet growing demand for intelligence.** With SAS 9.2, many new capabilities have been added to make it easier than ever to get the power of SAS up and running and keep it running in an optimal manner as use increases. Comprehensive new logging and management functionalities ensure reliability, visibility and manageability of the SAS platform. Server status now can be managed from third-party tools, and servers can be started and stopped in a controlled manner remotely, making the SAS environment more reliable for business users and easier to manage for IT.



Ready to learn more?

Call us at 1-800-727-0025 (US and Canada) or [request more information](#).

Questions?

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White Paper

SAS® 9.2 Software Key Highlights

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SAS® 9.2 Software

» Overview

RESOURCES

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MARKET VALIDATION

» Customer Success

CUSTOMER SUPPORT

» Product Support

Feedback

Did you find the information you were looking for?

Yes No

Was it easy to find?