**SAS® Space Planning**

Deliver more targeted and effective space plans to increase sales.

Effective retail space planning and management is a key part of the merchandise planning/execution life cycle. A well-designed shopping environment attracts customers, prevents stockouts, drives inventory productivity, reduces operating costs and, most importantly, increases the financial performance of the store.

SAS Space Planning lets you manage assortment-to-space allocation hierarchically, with both top-down and bottom-up views of performance. Fully integrated with SAS Merchandise Planning, the solution gives you detailed, end-to-end control of the entire planning process—financial, assortment and space—within a single data repository. And you can use powerful, flexible SAS reports to tap into these rich data resources.

At the macro level, where category space allocations and adjacencies are determined, SAS Space Planning can:
- Audit store floor plans to analyze financial performance.
- Extract floor plans from CAD drawings for precise, store-specific dimensioning.
- Effectively allocate store square footage to each merchandise category.

At the micro level, where shelf assortments are determined, the solution can:
- Create detailed planograms based on merchandise requirements and available store space.
- Ensure accurate planogram rendering by you or your suppliers using detailed fixture component dimensions and SKU data.

SAS Space Optimizer, available separately, can automate the process for efficient generation of store-specific planograms that account for the unique configuration of each retail location.

### Benefits

- **Increase revenue and inventory productivity.** SAS Space Planning lets you determine optimal floor and shelf space allocations so that each store is merchandised with an assortment that best meets customer demand. This helps retailers achieve the best overall return on invested capital by driving top-line sales while maximizing returns on both inventory and shelf space investments.

- **More efficiently map assortments to planograms.** SAS Space Planning integrates space allocation with inventory, assortment planning and replenishment processes, facilitating higher levels of collaboration between display planners and merchants. Assortment plans are deployed on planograms that incorporate best practice visual merchandising and presentation display techniques to enhance the customer’s shopping experience.

- **Improve planogram performance visibility.** The solution stores planogram components in a relational database that supports a variety of cost, dimension and user-configurable attributes, enabling the retrieval of detailed information about each pegboard, shelf, beam, sign and SKU.

- **Enhance planogram content and change communications.** Distribution packages incorporate layout and spreadsheet views of planogram data that are configurable in terms of content and format. You can then distribute report packages to a network location or printer as PDF files. The solution’s Store Layout Viewer lets users navigate and view changed planograms using a Web browser. And the SAS Planogram Collaborator facilitates planogram exchanges between vendors and retailers.
Capabilities and Features

Effectively manage your location hierarchy

SAS Merchandise Planning and SAS Space Planning support the use of a 10-level hierarchy structure for organizing retail space assets. The location hierarchy is used in conjunction with merchandise and time hierarchies to facilitate performance analysis.

SAS Space Planning focuses on location objects within the store—departments, areas, sections and planogram contents. With the solution, you can:

- Access detailed information in layout or spreadsheet views from any node on the location hierarchy tree.
- Compare sales performance across stores where comparable planograms are deployed.
- Configure location naming and location structuring using metadata.
- Drill down through the entire retail estate.
- Manage multiple retail channels—brick and mortar, catalog, Internet, etc.

Accurately capture retail location dimensions

The solution lets you define and manipulate regular locations using a drag-and-drop interface in cases where approximate display dimensions will suffice. More precise measurements for non-rectangular space are supported using StoreCAD Plus to interface with AutoCAD. In addition you can:

- Accurately define store, department, area and section boundaries.
- Estimate sales-per-square-foot productivity of defined areas.
- Summarize and average dimensional data in spreadsheet views of store locations.

Gain detailed control and visualization of the planogram creation process

SAS Space Planning provides unprecedented control over the entire planogram process, including:

- Fixture components—pegboards, shelves, uprights, beams and pegs—that are defined in SAS retail data libraries and match actual hardware used in store displays.

- Components assembled using a drag-and-drop interface that features “snap into place” logic to prevent component mismatching.
- Detailed control over the planogram construction process, using physical attachment rules and attributes with configurable attribute listing, orientation, rotation, stacking, filling, nesting and capping formatting options.
- Zoom, angle view and drill-in viewing options.
- Photorealistic 3-D views of planogram layouts, which are rendered and viewed using pan, zoom, rotate and drill-in controls.
- Configurable attribute listing of items required in planogram creation.
- Robust product display formatting options for orientation, rotation, stacking, filling, nesting and capping.

Correctly version and assign planograms

SAS Space Planning gives you visibility into the locations where a specific planogram is assigned for a given time duration, providing complete management of the planogram life cycle. You can copy a new version, apply necessary amendments and assign the new version to the same locations as the previous version.

Prior to approving assignments, the solution performs a series of audits to check conditions, such as size mismatches or insufficient lead time. The Planogram Assignment feature can deploy planograms at multiple store locations simultaneously. The solution also provides:

- Support for unlimited versions of the same planogram.
- An easy-to-use interface for finding locations where a current planogram version is assigned or matching a new planogram with clustered or specific store locations where its use would be appropriate.

A 3-D graphics rendering engine with pan, zoom and rotate controls enables enriched planogram layout views.
• Automatic date-driven replacement of outgoing versions with incoming versions using a nightly batch process.

**Publish and share planograms as needed**
Remerchandising of a category often involves the creation of thousands of store destination planogram reports that must be published overnight. The SAS solution enables timely and efficient distribution of planograms to ensure the execution of desired display practices and correct inventory quantities at the store. In addition:

- Distribution packages include configurable multipane graphical or spreadsheet views of planogram content, including digital images.
- Report destinations can be defined using PDF or Web options.
- Distribution packages are published based on the set of store locations defined at run time.
- SAS Planogram Collaborator provides a simple mechanism for exporting and importing planograms from any SAS retail database.

**Calculate capacity, allocated and used space**
Space productivity measurements need to make allowances for non-selling space in a store footprint. SAS Space Planning automatically calculates these productivity factors and allocated selling space for use in analysis. In addition:

- Procedures for calculating space metrics are built into the database.
- Space metrics are aggregated across the location hierarchy.

**Automate the planogramming process with SAS® Space Optimizer**
Deploying SAS Space Optimizer with SAS Space Planning enables the automated generation of store-specific planograms based on the category-level space plan, the desired assortment and the physical layout and fixture dimensions of each store. SAS Space Optimizer is a sister solution that is sold separately. This combination of solutions provides capabilities that enable you to:

- Establish product affinity groups that specify which products on a planogram must not be separated during the automation process.
- Arrange product affinity groups to achieve category sizing, pricing and branding strategy objectives.
- Combine weighted objectives to drive the planogram generation process, enabling proportional emphasis on inventory goals or display practices.
- Automatically adjust product positions based on how much cubic shelf space is available, using key performance indicators in the shelf assortment.
- Specify traffic flow and spacing policies that support the desired look and feel on the sales floor.

### Key Features

**Location hierarchy management**
Definition and management of the retailer’s location hierarchy using spreadsheet and graphical views at each level.

- Configurable naming and location structuring.
- Drill-down navigation.
- Support for multiple channels.

**Store location dimensions and positioning**
Capture of accurate dimensional data for store, department, area and planogram locations.

- Drag-and-drop interface for rectangular locations.
- StoreCAD Plus support, with an interface to AutoCAD, for non-rectangular spaces.
- Precise calculation of square and cubic feet.
- Spreadsheet views of store locations.

**Planogram construction process control**
Detailed control over planogram construction using physical attachment rules and attributes.

- Configurable attribute listing.
- Orientation, rotation, stacking, filling, nesting and capping formatting options.
- Zoom, angle view and drill-in viewing options.

**Planogram assignment and versioning**
Versioning of planograms to enable remerchandising, product substitutions, changes in assortment mix or fixture modifications.

- Unlimited version support.
- Easy-to-use interface.
- Automatic batch process version replacement.

**Planogram publishing and sharing**
Distribution of planogram reports to store locations using PDF or HTML formats.

- Configurable graphical or spreadsheet views.
- SAS Planogram Collaborator for exporting and importing planograms.

**Space calculations**
Calculation of capacity, allocated and used space for financial performance reporting.

- Built-in procedures for calculating space metrics.

**Automated store-specific planogramming with SAS® Space Optimizer**

- Ability to establish product affinity groups.
- Arrangement of product affinity groups per category strategies.
- Automatic product positions and spacing adjustment to achieve key merchandising objectives.
Technical Requirements

**Client environment**

- Operating system: Microsoft Windows XP/SP2
- Database connection via ODBC
- Thick client workstation: Intel Pentium 4 with 512MB RAM minimum

**Server environment**

- RDBMS platforms include Oracle 10g, Microsoft SQL Server 2005, IBM/UDB 8.2
- Operating system: Microsoft Windows Server 2003

**Required/optional software**

- StoreCAD Plus requires AutoCAD 2006 on the client workstation
- Adobe Acrobat 7 or 8 is required for distributing PDF reports
- Microsoft Internet Explorer 6 or 7 for Store Layout Viewer