Get the Most Out of Your Planning Application

SAS® Merchandise Planning 6.7

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THE POWER TO KNOW

Contents

A Modern User Interface That Doesn't Get in Your Way

Have you ever thought, "SAS Merchandise is so feature rich, if only the user interface was easier to use this application would have it *all*." Well, we heard you and we've got your answer—SAS Merchandise Planning 6.7.

We have significantly improved the planning process by providing a more modern, responsive, and intuitive experience for our users with each point and click. Why does the user interface matter? When your workspace is designed so that you can find what you are looking for faster, your job is easier.

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Users will notice the improvement immediately upon signing in to the application. Changes include fonts that are easier to read, a more pleasing color palette, and better use of on-screen space. From the dashboard to the worksheet to the toolbar, the updates provide a crisper and more visibly appealing workspace.

Here are some examples when working on a worksheet or performance analysis view:

- **Worksheet ribbon and toolbar options**: We've placed features and functions on a new ribbon and added a quick access toolbar for the actions you use most often. Whether you use the ribbon, the quick access toolbar, shortcut keys, or a right-click menu, finding what you want is easy and intuitive. For new users, the organized options and useful tooltips will help you to get to know the application faster and begin to build their plans sooner. For seasoned users, you will spend more time on content and less time on navigation.

  Need more space for the worksheet? We've got you covered. The ribbon can be quickly collapsed and expanded as needed.

- **Business process flow:** The customizable business process workflow positioned at the top of the page easily guides you through the planning process.
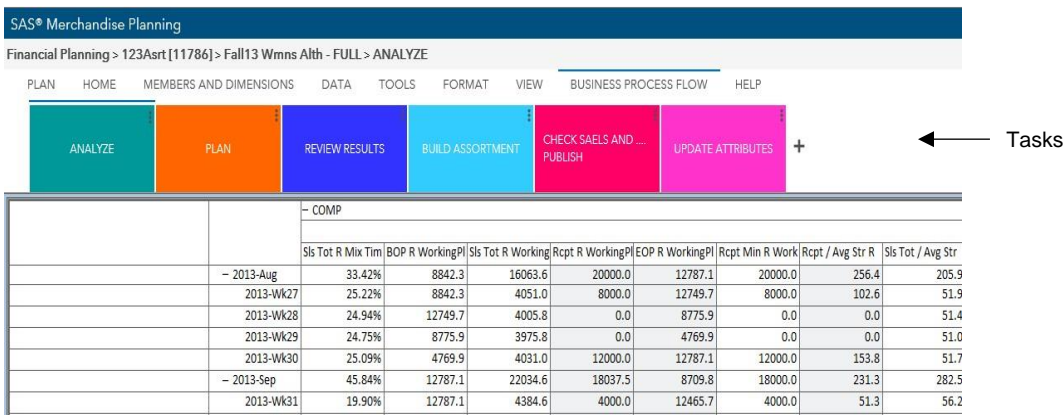
- **Better grid:** The grid is easier to read and the overall contrast in the worksheet has visually improved.

- **Navigating to a worksheet and back:** When you are using a worksheet, a new button is available that enables you to quickly return to the page you previously opened. Likewise, from that previously opened page, you can then return to the worksheet with the click of a button. This new navigation makes switching back and forth—for example, from the Dashboard or Plan Management—quick and easy.

Other notable user interface changes include:

- **More space to plan:** Side menus on the Home pages, and filtering options on other pages, expand and collapse which leaves you more space for important content.

- **Streamlined SAS experience:** By adhering to SAS web application standards, SAS Merchandise Planning offers a more seamless transition between it and other SAS web applications.

We have made great strides in user interface improvement with version 6.7. The transformation is still a work in progress that will continue to improve with each release.

Features and Functions that Improve Efficiency

SAS Merchandise Planning is feature-rich and we've added more. In case you haven't heard about them, here are a few recent enhancements that save time and help users to build better plans.

One Worksheet, Multiple Currencies

Support for planning in multiple currencies is key to survival for retailers. More retailers than ever before are expanding their reach internationally either through physical expansion or internet sales. In order to remain profitable, it is necessary to understand the impact currency rate changes have on the bottom line. The ability to plan for multiple local currencies and seeing the impact plan changes have on the corporate reporting currency is key.

Understand the impact currency rate changes have on the bottom line.

Planning using multiple currencies is optional. You can designate which KPIs need to be converted—currency is assigned by location member and level. The multi-currency solution is flexible and easy for users to use.

When you upgrade, you will need to supply the appropriate data such as currency name and the exchange rate if you choose to take advantage of this feature.

As you consider using multi-currency you should understand these foundational assumptions:

- All data is stored in the Corporate Currency – Plan, Historical, Forecast, etc.

- The conversion rate is stored with the fact data at the time it is loaded (phase one will support one rate for all levels of time for fact data for a year).

- Historical and Plan Reference Rerate is done on open.

- Local is always realized revenue and corporate is rerated.

- All worksheets in a plan version share the same rate group. The plan version rate group is always saved with the Plan data.

Seeding and referencing is key to planning, so to keep the solution simple there are three rules for seeding and referencing:

- For seeding, historical data is always converted based on the stored fact rate to get the corporate currency back to local currency. Then the Plan Version rate group applied to local currency to get new corporate currency held in the planning engine. This applies to any History or Forecast Version.

- For seeding Plan (SB or submitted), data is always rerated based on stored rate for the Plan to get corporate currency back to the local currency. Then the Plan Version rate group is applied to the local currency to get the new corporate currency. This applies to all SB data except Version Group.

- Version Groups are converted to local then the appropriate aggregation rule is applied. These values are then converted to the corporate currency for the planning engine.

  The conversion from database for seeded/reference values uses a simple consistent rule, which reduces confusion. The calculation for conversion is as follows:

  From the Database (FACT table) to the Planning Engine (PE)

  - Stored corporate values * stored fact exchange rate / the working plan exchange rate

  From the Save Plan Data (SB) to the PE

  - Stored SB corporate value * stored SB working plan exchange rate / target plans working plan exchange rate

  The conversion layer for what the user sees, employs the same simple principles. The calculation in the UI conversion layer is as follows:

  From the PE to the display

  - Corporate values * working plan exchange rate

  From the UI to the PE

  - Local values / working plan exchange rate

At times rates can be volatile, and it isn't helpful to use a planning exchange rate that will not help you predict the impact of fluctuations to your bottom line. Therefore when Finance feels the rates have moved enough to require a change, a plan version rerate will need to be executed. This process is kicked off from the front end by viewing a list of plan versions. Users with privileges (usually your admin) can select a plan version then click the **Rerate** button. The rerate process makes a copy of the plan version and rerates all worksheets and submitted values associated with the plan version. This includes what-ifs and excluded members. This job should be scheduled to run off hours.

Working with Members

Finding members, populating the worksheet with the members you want where you want them, and preserving member data are important. We've added features that make these tasks easier and faster.

- **Locking Members**: A planner might want to be able to lock a section of the plan once they have completed working on it to ensure that section is not impacted by changes made at higher levels of the plan. This is a common practice in all the types of plans we support. This is useful, for example, in order to preserve vendor/manufacturing commitments, new store openings, or time period commitments. Member locking supports that scenario and many more.

  Users can now lock a member on any dimension and preserve the planned values. Member locks are put in place by each user and stay in place until removed. Locking down key members allows the other members to absorb high level changes. Visual cues, shown below, indicate where locking is applied.

		2014-Spring						
		Sls Tot U WP	Sls Tot R WP	Sls Reg R WP	Sls Reg U WP	Sls Clr R WP	Sls Clr U WP	Sls Pro R W
(L) WOMENS ATHLETIC APPAREL-071	(H) WMNs AthIt S2013 PopSpend	686	0.00000	0.00000	686	0.00000	0	Explicit Lock
WMN CORE/BASIC TOPS 3.25-0704	(H) WMNs AthIt S2013 PopSpend	193	0.00000	0.00000	193	0.00000	0	0
	RURAL, 150	14	0.00000	0.00000	14	0.00000	0	0.00000	0
	RURAL, 25	14	0.00000	0.00000	14	0.00000	0	0.00000	0
(L) WMNS WKOUT SHORT/LEG 2.75-0773	(H) WMNs AthIt S2013 PopSpend	493	0.00000	0.00000	493	0.00000	0	0.00000	0
	RURAL, 150	36	0.00000	0.00000	36	0.00000	0	0.00000	0
	RURAL, 25	36	0.00000	0.00000	36	0.00000	0	0.00000	0
(L) DANSKIN, INC.-0773-00829	(H) WMNs AthIt S2013 PopSpend	493	0.00000	0.00000	493	0.00000	0	0.00000	0
DANSKIN SL BIKE BLACK MED-0773-00829-1583	(H) WMNs AthIt S2013 PopSpend	293	0.00000	0.00000	293	0.00000	0	0.00000	0
DANSKIN SL CAPRI BLACK ME-0773-00829-1561	(H) WMNs AthIt S2013 PopSpend	100	0.00000	0.00000	100	0.00000	0	0.00000	
DANSKIN SL PANT BLACK MED-0773-00829-1562	(H) WMNs AthIt S2013 PopSpend	100	0.00000	0.00000	100	0.00000	0	0.00000	

Implicit Lock

- **Dynamic Model Creation—Building Your Assortment:** When creating an assortment it is a common practice to create placeholders for new items that will replace existing items in the assortment. The number of placeholders can vary from one merchandise area to the next. This process can be time consuming and repetitive, but it is essential before planning can begin.

  Using the new Build Assortment feature, buyers can create placeholder items the way they think about styles and colors by telling the system how many styles to create and how many colors go with those styles. But the benefit doesn't end there.

  Build Assortment continues the thought process evolving through Product Rationalization and the insights from Recommended Assortment by using the same Product Disposition attribute. When the value is Shop, the system knows to use it as a source item to create new items.

  Buyers can manually override the product disposition values on any item. This new feature supports the creation of multiple model members using a single source in a single step. It works like the buyer thinks, thus reducing non-value add effort.

- **Copying a Member:** To save time when copying members, the Copy Member option now supports the simultaneous creation of multiple merchandise members. In the worksheet, you select the members to copy and then select the parent to which to add the copied member.

- **Going To a Member:** Another time-saver, the Go To Member option helps users to quickly search for a specific dimension member without having to scroll. For example, users can search for a specific store, style, or week. The option can also be used with dynamic levels.

Copying/Pasting Data From and Exporting to Microsoft Excel

The ability to copy/paste text data from Microsoft Excel speeds up attribute transfer. It reduces errors and the time it takes to get to the real planning tasks.

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We've increased the limits on the amount of data to export to Excel (to meet the current Excel limits). Users will no longer have to make changes to their worksheet or view before exporting.

Customizing the Display

- **Highlighting Rows and Headers:** Users can highlight current rows and headers just like in Microsoft Excel, allowing users to quickly identify the intersection that is represented by a selected cell.

- **Resizing Panes:** Users can resize multiple panes and the new dimensions are now saved when you save the worksheet.

- **Resizing Images:** Improvements made to the display and resizing of images that are in the inner-most row or column position, allow users to fully understand what the assortment looks like to their customers. The changes are saved when you save the worksheet.

- **KPI Scaling:** To enhance worksheet readability, users can view KPIs that contain large values in a scaled format. SAS Merchandise Planning supports formatting KPIs using a divide by scale of 1,000. For example, the value 5,000 displays as 5 and 100,000 displays as 100.

Template Management Improvements

We've made improvements in the way templates are managed, including:

- **Ability to Update a Source Template from a Worksheet:** A new Update to Source Template option is available that enables you to save the definition of a worksheet's current template to its associated source template. Access to this feature is determined by a function level security setting.

- **Ability to Identify Which Template is Associated with a Worksheet:** You can now easily identify the source template that is associated with a worksheet. It is displayed in the following locations:
    o   In the banner of an open worksheet.
    o   In the Source Template Name and Id field on the **Properties** tab of the Preferences window.
    o   In the Edit Worksheet window and in the Edit Performance Analysis View window.

Performance Analysis Improvements

We've made it easier to work with performance analysis views with these enhancements:

- **Ability to Save Performance Analysis View Settings:** So that you don't have to reapply certain settings each time you open your view, when you save the view, these settings are saved:
    o   KPI and dimension wrapping
    o   Formatting
    o   Highlighting

- o   Dimension layout
- o   Open to levels

Access to this feature is determined by a function level security setting. If required, views can be designated as protected to ensure changes cannot be saved.

- **Ability to Protect Performance Analysis Views:** To ensure roll-up and reporting integrity, we've introduced the concept of a master view. It is implemented by a setting that protects your performance analysis view so that users cannot making changes. The new **Protect** option is available during view creation or by using Edit Properties. The **Protected** column in your business view indicates whether a view is protected.

Insightful Analytics that Speed Up Decision-making

The SAS Merchandise Planning worksheet analytic infrastructure is intended to directly impact planning decisions by providing new insight faster. Three core worksheet analytic processes are available: Recommended Assortment, Product Rationalization, and Assortment Optimization.

- **Recommended Assortment:** Recommended assortment evaluates your assortment, looking at its key characteristics, and generates a report that enables your buyers to make better decisions about what to buy next. Sections of the report include attribute significance, attribute impact by location group, attribute combination heat map and attribute combination recommendations. This report uses advanced algorithms to determine attribute correlation that allows you to focus on those attributes that are meaningful and actionable. Once you understand which attributes are influencing your customers to make their next purchase, you can fine-tune your product assortment and position products in locations where they are mostly likely to sell.

- **Product Rationalization:** Product rationalization helps your users build better plans by getting unbiased answers that drive sales and margins. This allows them to apply consistent rules to get a true picture of which products are winners and losers. Determining which styles to keep from one year to the next is a necessary and lengthy process. It is generally based on key financial metrics and business rules. Buyers and planners evaluate products against these metrics by applying techniques of sorting, highlighting and filtering to identify which members meet acceptable standards across all the metrics. Not only is this a tedious process, but it is highly subjective and prone to error due to the complexity and volume of products being evaluated.

  With SAS Merchandise Planning analytics, you can run an automated process to apply your business rules consistently to the process of rationalizing your assortment. The technology allows you to create rule sets that group metrics together that can be applied to the each business as appropriate. The analytic is configurable to fit your business process and the assortment type. The models can support competing business objectives by considering multiple KPIs, weighting each KPI and defining the range of what meets the shop/drop/keep criteria.

  This analytic takes the time consuming and complex process of rationalization down to minutes.

	– (R) Jeans	Alexia Distressed White Jeans	Alyssa Straight Fit Jeans	Axel Distressed Skinny Jeans	Emily Skinny Jeans	Faith Distressed Jeans	Farrah Flare Jeans	Jessica Skinny Jeans	Jonas Bootcut Jeans	Katherine Straight Jeans
Image Front										
Product Disposition		Drop	Shop	Shop	Shop	Shop	Drop	Shop	Shop	Shop
Sales Units (K)	96	2	30	5	5	4	3	16	5	5
Sales Units Merch Mix%	100.00%	5.43%	75.79%	10.48%	11.93%	10.85%	44.04%	36.29%	68.54%	13.36%
Total Sales (K)	USD 458	USD 6	USD 199	USD 16	USD 16	USD 15	USD 10	USD 83	USD 17	USD 19

- **Assortment Optimization:** Assortment optimization analytics enable CPG wholesalers and hardline retailers to maximize their return on space investment by statistically recommending a location specific assortment established on each store's demand and available space. The recommendation is based on a set of available products constrained by business rules and shopper behaviors that are applied at both the item and category level. It creates the ideal product selection, facings, and inventory recommendations for every item and every store. Rapidly localizing all of your assortments and saving your users valuable time.

We provide an infrastructure that is designed to allow you to create your own analytics using your intellectual property to provide for better and consistent decision-making for your users.

Less Time Waiting, More Time Planning

If seamlessly executing your business process appeals to you and you agree that nothing is worse than having your users thought process interrupted by waiting for a worksheet to open, to recalculate, or get to the next task, then plan your upgrade to the latest release where those features work faster.

Better performance keeps the planning process flowing.

One of the most time-saving advances we've made is to further enhance the calculation compilation code. Changes made in version 6.5 resulted in incremental improvements of 3-5 percent over the 20 percent improvements made in the previous version.

Other changes that impact overall worksheet performance are improved MPLAN partitioning, reduced number of queries to the database, and new performance options for Cluster History aggregation.

All these changes add up to an improved experience for your users by providing an uninterrupted flow of the planning thought process. Additionally these changes reduce database traffic and free resources to improve overall processing.

Integrating Merchandise Planning with Other SAS Solutions

The integration with Enterprise SAS Visual Analytics allows you to use a robust business intelligence platform that provides approachable analytics, visual exploration, data discovery, reporting and SAS Mobile BI all in one single solution that meets the needs of any size business or department. You can now combine non-planning data such as syndicated data with your planning data to gain additional insight you might not be able to see otherwise.

When you are using SAS solutions, such as SAS Size Profiling and SAS Pack Optimization, that require the same data or a subset of data, it is time consuming to prepare multiple files with the same data. This impacts solution availability and puts a strain on your resources by requiring efforts to be duplicated. With SAS Merchandise Planning, you no longer have to generate and load two separate files. You just provide the one and the technology will make sure each application has what you need to be effective. This will allow your IT department to generate data files faster by reducing overhead and providing only incremental data. It will free these resources to do other tasks and adds to better utilization of system resources.

Cloud Enabled

This new deployment option offers faster access to new resources by removing the lead time needed to design, procure and on-board new infrastructures. Cloud computing allows organizations to begin with an initial small deployment and then scale when required so that the size of the infrastructure is always matched to the demands placed upon it. It's a convenient option when deploying SAS Merchandise Planning.

SAS Merchandise Planning 6.7 Upgrade

The latest release, SAS Merchandise Planning 6.7, is inclusive of all hot fixes starting with 6.1.3 M6 Hot Fix 9 through 6.6. The current version ships with SAS 9.4 M4 and includes support for Oracle 12c and Windows Server 2012. It was released in August 2017.

Supported Versions and Compatibility

In addition to Amazon Web Service deployment, SAS Merchandise Planning 6.7 adds support for Windows 10 and Office 365. Support for Internet Explorer 10, Oracle 11 and Window Server 2008 was dropped with the previous release of SAS Merchandise Planning.

The following table shows the full support matrix for version 6.7:

Application Server	Operating Systems	Database	ODBC Driver	Client Software
SAS® Web Application Server 9.4 M4	IBM® AIX 7.1 Microsoft Windows Server® 2012 R2 Family Red Ha®t Enterprise Linux (RHEL) 6.5 (or higher)	Oracle® 12c (12.1.0.2)	DataDirect® Technologies 7.1.5	Windows® 7, 8 and 10 Remote Desktop Services Citrix® XenApp Server Microsoft® Internet Explorer 11 (32-bit browser support only) Java® Runtime Environment (JRE) 8
SAS 9.4 M4				
AWS				

We've also made the following technical changes:

- Added support for CYGWIN with MDI when using Windows Server 2012.

- Removed all clear-text passwords throughout the system.

- Changed the context root of the URL to include the product names–a SAS standard.

- New system scripts to clean up analytic temp tables.

- New tables support the model concept within the analytic infrastructure. These tables are leveraged by both Product Rationalization and Assortment Optimization.

SAS Merchandise Planning 6.7 is compatible with SAS Merchandise Allocation 3.7.

Summary

Like what you read? Many of the recent improvements and enhancements that we described above are summarized in the figure below.

Modernization		
Web-like look and feel throughout		User-friendly worksheet grid and ribbon navigation

Features and Functions		
Improved Usability	New Functionality	New Features
Better template management	Multi-currency planning KPI Scaling	Copy/paste data from Excel Highlight column/row headers
Performance Analysis user preferences Master Performance Analysis views	In Worksheet Analytic infrastructure	Push Template Changes
Improved worksheet performance Parallel data version loading/Fact data retrieval improvements	Go to a member	Create model members with choice of data source
	Build Assortment	

Analytics	
Recommended Assortment Assortment Optimization (hard lines) Product Rationalization	Publish to SAS Visual Analytics and Reporting Links to SAS Visual Analytics

Lower Cost of Ownership	
Support for Linux Operating System Adoption of SAS Web Application Server Data level integration to SAS Size and Pack Optimization	Integration of SAS Merchandise Planning Data with Enterprise SAS Visual Analytic

Contact your SAS representative for more information and next steps.

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To contact your local SAS office, please visit: sas.com/offices