

# SAP Retail Space Management Interface



HELP.ISR

**Release 4.6B**



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## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax
	Tip

## Contents

<b>SAP Retail Space Management Interface .....</b>	<b>5</b>
<b>SAP Retail Space Management Interface.....</b>	<b>6</b>
<b>Variant 1: Space Management for Information Only.....</b>	<b>10</b>
Process: Space Management for Information Only.....	12
<b>Variant 2: New Placement for an Article.....</b>	<b>13</b>
Process: New Placement for an Article .....	16
<b>Variant 3: Moving an Article to a New Location .....</b>	<b>18</b>
Process: Moving an Article to a New Location .....	21
<b>Variant 4: Manual Shelf Space Maintenance.....</b>	<b>23</b>
Process: Manual Shelf Space Management .....	27
<b>Variant 5: Discontinuing an Article .....</b>	<b>28</b>
Process: Discontinuing an Article.....	31

## SAP Retail Space Management Interface

# SAP Retail Space Management Interface

## Use

In retail stores, space management can play a critical role:

- It helps avoid stockouts and thereby lost sales.
- It helps boost sales revenues. For example, grocery articles displayed on end caps and promotional merchandise near a department store mall entrance are more likely to capture the attention of shoppers than articles buried away in a side aisle or in the back of the store. You want to monitor prices, sales volumes, and margins so as to place your most profitable articles in high-traffic, high visibility areas.

There are several "planogram" software packages available that manage store merchandise placement. They determine the optimum location for articles within shelves and calculate the appropriate amount of space to be allotted to the articles, based on a number of factors such as sales volume, margins, manufacturer, article type, and so on. Now you can integrate these external programs with R/3, with data flow in both directions.

You can use this ALE Business Process in the following variants:

[Variant 1: Space Management for Information Only \[Page 10\]](#)

[Variant 2: New Placement for an Article \[Page 13\]](#)

[Variant 3: Moving an Article to a New Location \[Page 18\]](#)

[Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#)

[Variant 5: Discontinuing an Article \[Page 28\]](#)

SAP Retail uses the following layout dimensions when modelling shelf space:

- Shelf compartment (vertical placement within a rack, e.g., top shelf, bottom shelf)
- Horizontal placement within the shelf
- Facing (the amount of space taken up by a single article along the front of the shelf)
- Front (vertical spacing)

A shelf is made up of layout modules, which contain an array of articles that *can* be displayed in the same area (for example, laundry detergents). Thus, a layout module may contain more articles than are currently on the shelf at the moment.

There are two kinds of layout modules:

- General modules: layout modules which can be used for several different stores. In this case, you need to define a reference store for which the article data within the layout module is fairly representative.
- Store-specific modules: For store-specific optimization, layout modules are only valid for a specific store (for example, store X is always the reference site for layout module Y). This can cause the number of layout modules and planograms to increase significantly compared to using general modules.

## Integration

There are several ways of exporting data from R/3 to an external space management program:

SAP Retail Space Management Interface

- **Executing the external space management program and exporting the key parameters**  
 Function module **shelf\_space\_opt\_keydata\_exp** calls an external program exporting parameters you have specified on the command line. The external program exports these parameters and starts the space management program. (Further details are available in the function module documentation.)
- **Executing the external space management program without exporting the key parameters**  
 Function module **shelf\_space\_opt\_program\_exe** calls the space management program and the corresponding planogram file (or, if a new shelf is to be created, then **ws\_execute** calls only the program without any planogram file). (The call command must include the directory path where the space management program is installed.) If the layout module already exists and a planogram document has been assigned to it in the R/3 Document Management System, then the program displays this document. If there are several such documents, you can select from a list. (Further details are available in the function module documentation.)
- **Executing the external space management program and exporting the key parameters**  
 Function module **shelf\_space\_opt\_ascii\_gen** calls an external program and exports the key parameters to a local ASCII file. The external program exports these parameters and starts the space management program. (Further details are available in the function module documentation.)
- **Exporting data into Microsoft Excel via OLE**  
 Function module **shelf\_space\_opt\_MsExcel\_exe** starts Microsoft Excel and then exports data for the selected articles (including heading data) via OLE. (Further details are available in the function module documentation.)



These function modules serve only as templates for creating customer-specific function modules. So when you create your own function modules you must insert the actual directory paths.

The following table shows the data elements that can be transferred between R/3 and the external space management program:

Outbound data (R/3 to external system)	Inbound data (external system to R/3)
Article number (from Article Master Data)	Facing (linear shelf space allotted to the article)
Article short text	Shelf
Unit of measure (e.g., 6-pack, 12-pack)	Location within the shelf
EAN/UPC	Maximum quantity
Article dimensions (size)	Optimum quantity
Unit of measure for dimensions (e.g., inches, cm)	Article dimensions (size)
Merchandise category	Front (vertical facing)
Inventory level	Presentation quantity

## SAP Retail Space Management Interface

Prices (cost and retail)	
Sales volume	
Sales revenue	
Manufacturer	
Flag for multiple placement (more than one shelf)	
Article type	
Number of multiple placements	
Placement information (facing, front, shelf and location within the shelf)	
Shelf quantities	

## Activities

For each existing layout module and for every subsequent new one you create, a version 0000 is automatically created. The layout version will be valid as of the current date. However, it will have a flag set to **planned**. When you are ready to trigger the posting BAPI, you must set this flag to **released**. You only set this flag once.

Currently, each layout module has only one version: 0000.

Each layout module has a specific starting date (the day it was created). The posting BAPI must always have the correct starting date for the layout module version 0000; otherwise, the system will generate an error message.

It is recommended that you make copies of your planogram file so that you don't overwrite your data when planning future changes. Consider using a naming convention that will help you remember the target for each plan; for example:

- dairy0000.doc = your generic planogram for dairy products
- dairy0199.doc = planogram for Q1 of 1999
- dairy0299.doc = planogram for Q2 of 1999
- dairy0399.doc = planogram for Q3 of 1999

## Layout Workbench for Space Planning

SAP Retail contains a layout workbench which gives you an overview of the layout structure for a site. Within a given hierarchy, the system displays the layouts, layout modules, version and documents assigned to the version are displayed. From the layout workbench, you can:

- Access all transactions involved in space management, including customizing transactions
- Display documents assigned to the layout modules, along with the relevant external program (normally planogram files executed by space management programs), and to display the articles of a version.
- Display all articles for a particular version, along with the status of the version (planned, active)

All functions relevant to listing control can be started from the layout workbench. In addition, you can control listing *without* linking to an external space management program.

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**Variant 1: Space Management for Information Only**

## Variant 1: Space Management for Information Only

### Use

In this variant the external space management program serves purely for information purposes, such as determining the current contents of a rack and analyzing profitability and space utilization. This variant is useful for assortment management with SAP Retail.

#### See also:

[Variant 2: New Placement for an Article \[Page 13\]](#)

[Variant 3: Moving an Article to a New Location \[Page 18\]](#)

[Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#)

[Variant 5: Discontinuing an Article \[Page 28\]](#)

### Integration

#### Functions in the R/3 System

- Assortment planning
- Information System
- Integrated article maintenance

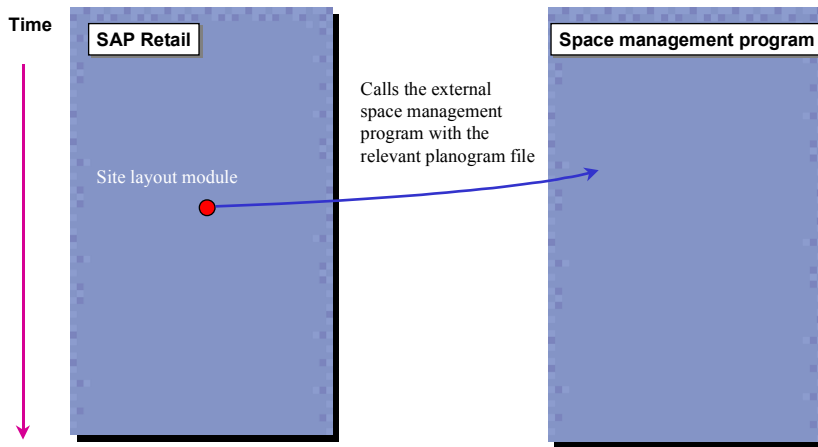
#### Functions in the External Space Management Program

- Color modelling of a shelf, possibly with digital images of the individual articles
- Possible highlighting of various parts of the shelf according to various key figures, such as sales volume, margin, etc.
- Various reporting functions

### Data Flow

There is no data exchange, since this variant is for information only. The external program is simply executed. If there is only one planogram file, it will be displayed. If there are several planogram files, you can select one from a list.

Variant 1: Space Management for Information Only



## Prerequisites

- Planograms modelled in the space management program according to the SAP layout concept
- Modelling of the layout concept in R/3, with layout modules assigned to layouts and layouts assigned to stores
- Creation of layout modules in R/3 and assignment of articles to them
- Creation of a document in R/3 Document Management System, with a link to a planogram file which in turn is assigned to a layout module

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Process: Space Management for Information Only

## Process: Space Management for Information Only

### Purpose

This process corresponds to the business process scenario: [Variant 1: Space Management for Information Only \[Page 10\]](#).

### Process

1. Specify the layout module you want to examine.
2. Function module **document\_show\_direct** calls the external space management program.
3. The space management program executes and displays the planogram relevant for that layout module. If more than one planogram exists, you can select the one you want. If there is no corresponding planogram, then function module **ws\_execute** simply calls up the space management program without displaying a specific planogram.

Because this variant assumes no data communication between R/3 and the space management program, all you can do here is examine the data.

## Variant 2: New Placement for an Article

### Use

This variant can be used in several ways:

- You can construct a completely new shelf. In this case, either new or existing articles can be placed in this new shelf.
- You can place a new article in an existing shelf.
- An article already on a store shelf can be also placed in another shelf, so that the article appears in two different places (for example, on end caps to indicate special pricing, with further stock in its usual place in the middle of an aisle).

This variant is constructed in SAP Retail via Workflow.

#### See also:

[Variant 1: Space Management for Information Only \[Page 10\]](#)

[Variant 3: Moving an Article to a New Location \[Page 18\]](#)

[Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#)

[Variant 5: Discontinuing an Article \[Page 28\]](#)

### Integration

#### Functions in the R/3 System

- Integrated article maintenance
- Assortment list
- Workflow for space management

#### Functions in the External Space Management Program

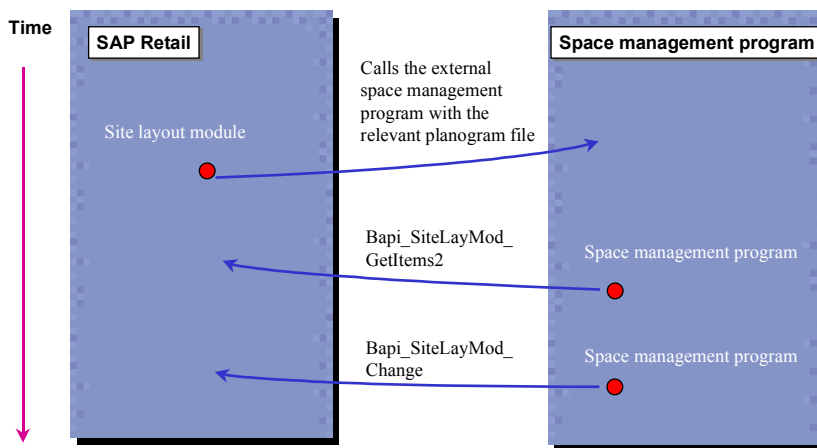
- Color modelling of a shelf, possibly with digital images of the individual articles
- Importing data by calling the Read-BAPI or by extracting from Microsoft Excel
- Possible highlighting of various parts of the shelf according to various key figures, such as sales volume, margin, etc.
- Various reporting functions
- Starting optimizing functions in the space management program based on key figures (such as sales volume)
- Executing the posting BAPI to export the optimized data to R/3

#### Data Flow

- When there are placement changes to layout module data, the Assortment List function triggers a Workflow job. This selects all the relevant article data and starts the export with the function module specified in the space management profile for the relevant store (maintained in Customizing).

**Variant 2: New Placement for an Article**

- If you are not using Microsoft Excel , then the space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems2** which imports the article data into the space management program.
- The space management program performs any necessary optimization tasks and changes shelf contents and configuration as necessary.
- The optimized article data is passed to interface's posting BAPI **Bapi\_SiteLayMod\_Change** which is then executed.



In this illustration:

1. First the external space management program is called. If there is only one planogram file, it is displayed. If there is more than one, you can select one from a list.
2. **Bapi\_SiteLayMod\_GetItems2** is called. It reads the export data and transfers it to the external space management program.
3. **Bapi\_SiteLayMod\_Change** is called. It imports the data from the external space management program and posts it in R/3.

**Additional BAPI Information**

The read BAPI **Bapi\_SiteLayMod\_GetItems2** can export data for one layout module to multiple sites (site groups, site hierarchies, or all sites) or to no sites. If you choose no sites, then only the master data will be exported.

The posting BAPI **Bapi\_SiteLayMod\_Change** has the following two indicators:

- A flag specifying whether listing conditions are to be created in R/3 for each combination of site and article.

**Variant 2: New Placement for an Article**

- A flag that determines whether the system should check the assignment of layout modules to sites. Normally this should be set to yes. If not, then article movement data will be exported, even though the layout module (to which the articles are assigned) is not assigned to the site. This flag is also available for the read BAPI.

The posting BAPI also modifies the assignments of articles to the layout module version (that is, it can both add and delete articles).

## Prerequisites

- Planograms modelled in the space management program according to the SAP layout concept
- Modelling of the layout concept in R/3, with layout modules assigned to layouts and layouts assigned to stores
- Creation of layout modules in R/3 and assignment of articles to them
- Creation of a document in R/3 Document Management System, with a link to a planogram file which in turn is assigned to a layout module.
- In Customizing you must specify:
  - Which information structures and which fields are to be used for goods movement data (such as quantities, revenue, and sales volume).
  - Which data is to be selected for export.
  - The selection period (timeframe) for determining movement data (daily, weekly, monthly).
  - Which function module is to be used for data export. (The function modules serve only as templates for customer-specific modules, so you must insert the actual directory paths.)
  - The specific local directory path where external programs such as the space management program are to be found.

## Restrictions

- The selection period in the information structure *must* be the same as that in Customizing.
- It is important that SAP Retail be the master system and the space management program as the slave. This means that only data recognized by SAP Retail can be posted. New articles which do not yet exist in SAP Retail, or price changes not reflected in SAP Retail, will be ignored. If you attempt to delete non-existent articles, the system will write error messages to an application log.
- It is not currently possible to take future layout module changes into account. Layout module changes will immediately affect the R/3 model, otherwise Workflow cannot be started. This can affect the contents of the assortment list. (Simple changes to the listing conditions, however, have no effect.)
- The system only recognizes newly listed or discontinued articles by either:
  - Placement changes to the relevant layout module, or
  - Execution of the manual shelf space maintenance program (Variant 4).

## Process: New Placement for an Article

### Purpose

This process corresponds to the business process scenario: [Variant 2: New Placement for an Article \[Page 13\]](#).

### Process

1. Creation of new layout modules or assignment of one or more articles to an existing one.
2. Periodic generation of the assortment list (full version or change versions).
3. Workflow generates work items.
4. When the work items are processed, Workflow Nr. 20000053 is executed.
5. Decide whether article data is to be displayed prior to export or not.
  - Direct export (no display of data beforehand)
    - Function module **planogram\_data\_read** first checks data for consistency. If key data (EAN/UPC code, article units of measure, dimensions) for an article are missing, then all articles within the layout module are displayed and the missing key fields for each article are highlighted in red. The system then reads the space management profile and checks it for consistency. Finally it selects the articles relevant for export, along with the corresponding master data and movement data.
    - The system reads the space management profile in Customizing to determine the function module to be used for export, then executes it.
  - Display of data to be exported:
    - Function module **planogram\_data\_read** first checks data for consistency. It then reads the space management profile and checks it for consistency. Finally it selects the articles relevant for export, along with the corresponding master data and movement data.
    - The Listviewer displays all articles assigned to the layout module in question (assuming they have the correct listing and sales validity dates).
    - The system reads the space management profile in Customizing to determine the function module to be used for export, then executes it.
6. The space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems**. The BAPI uses the function module **planogram\_data\_read** to retrieve the layout module data from the buffer and copy it to the space management program. (The space management profile in Customizing determines which data will be selected.)
7. The space management program calls the posting BAPI **Bapi\_SiteLayMod\_Change**. This posts the data to R/3.



There are two user exits should you wish to insert your own custom export function modules. These occur after the read BAPI **Bapi\_SiteLayMod\_GetItems** has run and prior to the execution of the posting BAPI **Bapi\_SiteLayMod\_Change**.



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**Variant 3: Moving an Article to a New Location**

## Variant 3: Moving an Article to a New Location

### Use

This variant is used to remove an article from one shelf and place it in a different one. This variant is constructed in SAP Retail via Workflow.

#### See also:

[Variant 1: Space Management for Information Only \[Page 10\]](#)

[Variant 2: New Placement for an Article \[Page 13\]](#)

[Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#)

[Variant 5: Discontinuing an Article \[Page 28\]](#)

### Integration

#### Functions in the R/3 System

- Integrated article maintenance
- Assortment list
- Workflow for space management

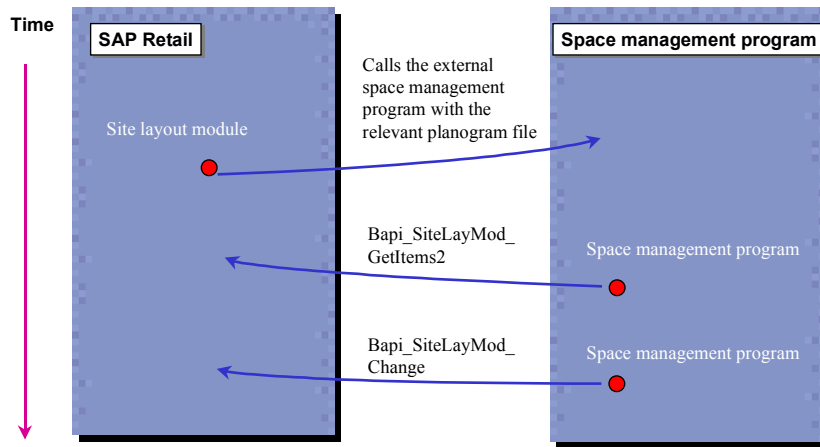
#### Functions in the External Space Management Program

- Color modelling of a shelf, possibly with digital images of the individual articles
- Importing data by calling the Read-BAPI or by extracting from Microsoft Excel
- Possible highlighting of various parts of the shelf according to various key figures, such as sales volume, margin, etc.
- Various reporting functions
- Starting optimizing functions in the space management program based on key figures (such as sales volume)
- Executing the posting BAPI to export the optimized data to R/3

#### Data Flow

- When there are placement changes to layout module data, the Assortment List function triggers a Workflow job. This selects all the relevant article data and starts the export with the function module specified in the space management profile for the relevant store (maintained in Customizing).
- If you are not using Microsoft Excel , then the space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems2** which imports the article data into the space management program.
- The space management program performs any necessary optimization tasks and changes shelf contents and configuration as necessary
- The optimized article data is passed to interface's posting BAPI **Bapi\_SiteLayMod\_Change** which is then executed.

Variant 3: Moving an Article to a New Location



In this illustration:

1. First the external space management program is called. If there is only one planogram file, it is displayed. If there is more than one, you can select one from a list.
2. **Bapi\_SiteLayMod\_GetItems2** is called. It reads the export data and transfers it to the external space management program.
3. **Bapi\_SiteLayMod\_Change** is called. It imports the data from the external space management program and posts it in R/3.

**Additional BAPI Information**

The read BAPI **Bapi\_SiteLayMod\_GetItems2** can export data for one layout module to multiple sites (site groups, site hierarchies, or all sites) or to no sites. If you choose no sites, then only the master data will be exported.

The posting BAPI **Bapi\_SiteLayMod\_Change** has the following two indicators:

- A flag specifying whether listing conditions are to be created in R/3 for each combination of site and article.
- A flag that determines whether the system should check the assignment of layout modules to sites. Normally this should be set to yes. If not, then article movement data will be exported, even though the layout module (to which the articles are assigned) is not assigned to the site. This flag is also available for the read BAPI.

The posting BAPI also modifies the assignments of articles to the layout module version (that is, it can both add and delete articles).

## Variant 3: Moving an Article to a New Location

### Prerequisites

- Planograms modelled in the space management program according to the SAP layout concept
- Modelling of the layout concept in R/3, with layout modules assigned to layouts and layouts assigned to stores
- Creation of layout modules in R/3 and assignment of articles to them
- Creation of a document in R/3 Document Management System, with a link to a planogram file which in turn is assigned to a layout module.
- In Customizing you must specify:
  - Which information structures and which fields are to be used for goods movement data (such as quantities, revenue, and sales volume).
  - Which data is to be selected for export.
  - The selection period (timeframe) for determining movement data (daily, weekly, monthly).
  - Which function module is to be used for data export. (The function modules serve only as templates for customer-specific function modules, so you must insert actual path names.)
  - The specific local directory path where external programs such as the space management program are to be found.

### Restrictions

- The selection period in the information structure *must* be the same as that in Customizing.
- It is important that SAP Retail be the master system and the space management program as the slave. This means that only data recognized by SAP Retail can be posted. New articles which do not yet exist in SAP Retail, or price changes not reflected in SAP Retail, will be ignored. If you attempt to delete non-existent articles, the system will write error messages to an application log.
- It is not currently possible to take future layout module changes into account. Layout module changes will immediately affect the R/3 model, otherwise Workflow cannot be started. This can affect the contents of the assortment list. (Simple changes to the listing conditions, however, have no effect.)
- The system only recognizes newly listed or discontinued articles by either:
  - Placement changes to the relevant layout module, or
  - Execution of the manual shelf space maintenance program (Variant 4).

## Process: Moving an Article to a New Location

### Purpose

This process corresponds to the business process scenario: [Variant 3: Moving an Article to a New Location \[Page 18\]](#).

### Process

1. Creation of new layout modules or assignment of one or more articles to an existing one.
2. Periodic generation of the assortment list (full version or change versions).
3. Workflow generates work items.
4. When the work items are processed, Workflow Nr. 20000053 is executed.
5. Decide whether article data is to be displayed prior to export or not.
  - Direct export (no display of data beforehand)
    - Function module **planogram\_data\_read** first checks data for consistency. If key data (EAN/UPC code, article units of measure, dimensions) for an article are missing, then all articles within the layout module are displayed and the missing key fields for each article are highlighted in red. The system then reads the space management profile and checks it for consistency. Finally it selects the articles relevant for export, along with the corresponding master data and movement data.
    - The system reads the space management profile in Customizing to determine the function module to be used for export, then executes it.
  - Display of data to be exported:
    - Function module **planogram\_data\_read** first checks data for consistency. It then reads the space management profile and checks it for consistency. Finally it selects the articles relevant for export, along with the corresponding master data and movement data..
    - The Listviewer displays all articles assigned to the layout module in question (assuming they have the correct listing and sales validity dates).
    - The system reads the space management profile in Customizing to determine the function module to be used for export, then executes it.
6. The space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems**. The BAPI uses the function module **planogram\_data\_read** to retrieve the layout module data from the buffer and copy it to the space management program. (The space management profile in Customizing determines which data will be selected.)
7. The space management program calls the posting BAPI **Bapi\_SiteLayMod\_Change**. This posts the data to R/3.



There are two user exits should you wish to insert your own custom export function modules. These occur after the read BAPI **Bapi\_SiteLayMod\_GetItems** has run and prior to the execution of the posting BAPI **Bapi\_SiteLayMod\_Change**.

Process: Moving an Article to a New Location

## Variant 4: Manual Shelf Space Maintenance

### Use

This variant is used for regular manual control of shelf space. You can run this report in batch mode on a regular basis (for example, each month), but you can also run it manually on an as-needed basis.

#### See also:

[Variant 1: Space Management for Information Only \[Page 10\]](#)

[Variant 2: New Placement for an Article \[Page 13\]](#)

[Variant 3: Moving an Article to a New Location \[Page 18\]](#)

[Variant 5: Discontinuing an Article \[Page 28\]](#)

### Integration

#### Functions in the R/3 System

- Report (transaction WPLG). Selection data includes: store or store group layout module, start date for the version, price calculation and listing check. In addition there are optional flags for:
    - Listing check
    - Layout check (checks the assignment of the layout modules to the stores)
    - Selection of all stores to which the layout module is assigned
    - No store selection (only master data is exported)
- If you do not select the reference store but choose another site instead, then the system issues a warning. If you confirm warning, then the system uses article data from the layout module of the store you entered.

#### Functions in the External Space Management Program

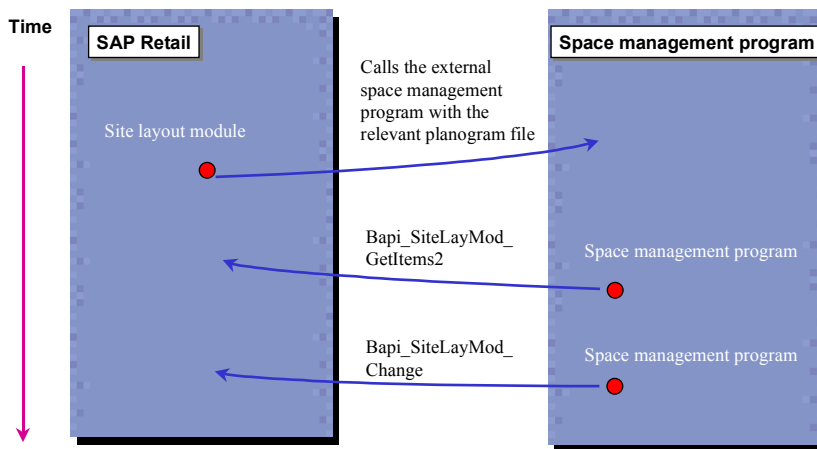
- Color modelling of a shelf, possibly with digital images of the individual articles
- Importing data by calling the read BAPI or by extracting from Microsoft Excel
- Possible highlighting of various parts of the shelf according to various key figures, such as sales volume, margin, etc.
- Various reporting functions
- Starting optimizing functions in the space management program based on key figures (such as sales volume)
- Executing the posting BAPI to export the optimized data to R/3

#### Data Flow

- You enter the selection criteria for the report.

### Variant 4: Manual Shelf Space Maintenance

- All relevant article data is read and either exported to Microsoft Excel via OLE, or else the external space management program is called.
- If you are not using the export to Microsoft Excel, the space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems2** which imports the article data into the space management program.
- The space management program performs any necessary optimization tasks and changes shelf contents and configuration as necessary.
- The optimized article data is passed to interface's posting BAPI **Bapi\_SiteLayMod\_Change** which is then executed.



In this illustration:

1. First the external space management program is called. If there is only one planogram file, it is displayed. If there is more than one, you can select one from a list.
2. **Bapi\_SiteLayMod\_GetItems2** is called. It reads the export data and transfers it to the external space management program.
3. **Bapi\_SiteLayMod\_Change** is called. It imports the data from the external space management program and posts it in R/3.

### Additional BAPI Information

The read BAPI **Bapi\_SiteLayMod\_GetItems2** can export data for one layout module to multiple sites (site groups, site hierarchies, or all sites) or to no sites. If you choose no sites, then only the master data will be exported.

The posting BAPI **Bapi\_SiteLayMod\_Change** has the following two indicators:

**Variant 4: Manual Shelf Space Maintenance**

- A flag specifying whether listing conditions are to be created in R/3 for each combination of site and article.
- A flag that determines whether the system should check the assignment of layout modules to sites. Normally this should be set to yes. If not, then article movement data will be exported, even though the layout module (to which the articles are assigned) is not assigned to the site. This flag is also available for the read BAPI.

The posting BAPI also modifies the assignments of articles to the layout module version (that is, it can both add and delete articles).

**Prerequisites**

- Planograms modelled in the space management program according to the SAP layout concept
- Modelling of the layout concept in R/3, with layout modules assigned to layouts and layouts assigned to stores
- Creation of layout modules in R/3 and assignment of articles to them
- Creation of a document in R/3 Document Management System, with a link to a planogram file which in turn is assigned to a layout module.
- In Customizing, additional fields for data selection must be filled out; for example,
  - Which information structures and which fields are to be used for goods movement data (such as quantities, revenue, and sales volume).
  - Which data is to be selected for export.
  - The selection period (timeframe) for determining movement data (daily, weekly, monthly).
  - Which function module is to be used for data export. (The function modules serve only as templates for customer-specific function modules, so you must insert actual path names.)
  - The specific local directory path where external programs such as the space management program are to be found.

**Restrictions**

- The selection period in the information structure *must* be the same as that in Customizing.
- It is important that SAP Retail be the master system and the space management program as the slave. This means that only data recognized by SAP Retail can be posted. New articles which do not yet exist in SAP Retail, or price changes not reflected in SAP Retail, will be ignored. If you attempt to delete non-existent articles, the system will write error messages to an application log.
- It is not currently possible to take future layout module changes into account. Layout module changes will immediately affect the R/3 model, otherwise Workflow cannot be started. (Simple changes to the listing conditions, however, have no effect.)
- The system only recognizes newly listed or discontinued articles by either:
  - Placement changes to the relevant layout module, or
  - Execution of the manual shelf space maintenance program (Variant 4).

Variant 4: Manual Shelf Space Maintenance

## Process: Manual Shelf Space Management

### Purpose

This process corresponds to the business process scenario: [Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#).

### Process

1. A user executes either report **RWREGPRO** or transaction **WPLG**.
2. Function module **planogram\_data\_read** selects the articles relevant for export, along with the corresponding master data and movement data, and displays them.
3. The system checks the space management profile in Customizing to locate the space management program, then exports the data.
4. The space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems**. The BAPI uses the function module **planogram\_data\_read** to retrieve the layout module data from the buffer and copy it to the space management program. (The space management profile in Customizing determines which data will be selected.)
5. The space management program calls the posting BAPI **Bapi\_SiteLayMod\_Change**. This posts the data to R/3.



There are two user exits should you wish to insert your own custom export function modules. These occur after the read BAPI **Bapi\_SiteLayMod\_GetItems** has run and prior to the execution of the posting BAPI **Bapi\_SiteLayMod\_Change**.

## Variant 5: Discontinuing an Article

# Variant 5: Discontinuing an Article

## Use

You use this variant to pass a discontinuation notice from R/3 to the space management program.

When you plan to discontinue an article, you set a date by which the article is to be physically removed from your stores. Prior to this date, the article must be removed from its assortment and can no longer be sold. Then with this variant, the space management program is instructed to remove the article from planograms. Only after all this takes place can Workflow continue with the actual discontinuation process.

When you choose to discontinue an article, the system first checks whether the article is assigned to a layout module; if so, the article cannot be discontinued. In this case, though, you will be given the opportunity to first remove the article from all layout modules, then continue with the discontinuation.

### See also:

[Variant 1: Space Management for Information Only \[Page 10\]](#)

[Variant 2: New Placement for an Article \[Page 13\]](#)

[Variant 3: Moving an Article to a New Location \[Page 18\]](#)

[Variant 4: Manual Shelf Space Maintenance \[Page 23\]](#)

## Integration

### Functions in the R/3 System

- Integrated article maintenance
- Assortment list
- Workflow for space management

### Functions in the External Space Management Program

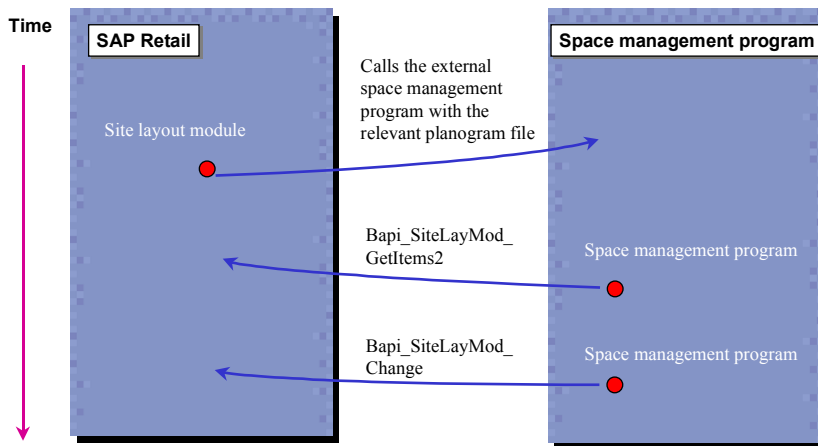
- Color modelling of a shelf, possibly with digital images of the individual articles
- Importing data by calling the Read-BAPI or by extracting from Microsoft Excel
- Possible highlighting of various parts of the shelf according to various key figures, such as sales volume, margin, etc.
- Starting optimizing functions in the space management program based on key figures (such as sales volume)
- Executing the posting BAPI to export the optimized data to R/3

### Data Flow

- When there are placement changes to layout module data, the Assortment List function triggers a Workflow job. This selects all the relevant article data and exports it directly via OLE into Microsoft Excel or calls the space management program.

Variant 5: Discontinuing an Article

- If you are not using Microsoft Excel , then the space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems** which imports the article data into the space management program.
- The space management program performs any necessary optimization tasks and changes shelf contents and configuration as necessary
- The optimized article data is passed to interface's posting BAPI **Bapi\_SiteLayMod\_Change** which is then executed.



In this illustration:

1. First the external space management program is called. If there is only one planogram file, it is displayed. If there is more than one, then no file is displayed.
2. **Bapi\_SiteLayMod\_GetItems2** is called. It reads the export data and transfers it to the external space management program.
3. **Bapi\_SiteLayMod\_Change** is called. It imports the data from the external space management program and posts it in R/3.

**Additional BAPI Information**

The reading BAPI **Bapi\_SiteLayMod\_GetItems2** can export data for one layout module to multiple sites (site groups, site hierarchies, or all sites) or to no sites. If you choose no sites, then only the master data will be exported.

The posting BAPI **Bapi\_SiteLayMod\_Change** has the following two indicators:

- A flag specifying whether listing conditions are to be created in R/3 for each combination of site and article.

### Variant 5: Discontinuing an Article

- A flag that determines whether the system should check the assignment of layout modules to sites. Normally this should be set to yes. If not, then article movement data will be exported, even though the layout module (to which the articles are assigned) is not assigned to the site. This flag is also available for the read BAPI.

The posting BAPI also modifies the assignments of articles to the layout module version (that is, it can both add and delete articles).

### Prerequisites

- Shelves modelled according to the SAP layout concept
- Creation of layout modules in R/3.
- Creation of a document in R/3 Document Management System, with a link to a planogram file which in turn is assigned to a layout module.
- In Customizing you must specify:
  - Which information structures and which fields are to be used for goods movement data (such as quantities, revenue, and sales volume).
  - Which data is to be selected for export.
  - The selection period (timeframe) for determining movement data (daily, weekly, monthly).
  - Which function module is to be used for data export.
  - The specific local directory path where external programs such as the space management program are to be found. (The function modules serve only as templates for customer-specific function modules, so you must insert actual path names.)

### Restrictions

- The selection period in the information structure *must* be the same as that in Customizing.
- It is important that SAP Retail be the master system and the space management program as the slave. This means that only data recognized by SAP Retail can be posted. New articles which do not yet exist in SAP Retail, or price changes not reflected in SAP Retail, will be ignored.
- It is not currently possible to take future layout module changes into account. Layout module changes will immediately affect the R/3 model, otherwise Workflow cannot be started. This can affect the contents of the assortment list. (Simple changes to the listing conditions, however, have no effect.)
- The system only recognizes newly listed or discontinued articles by either:
  - Placement changes to the relevant layout module, or
  - Execution of the manual shelf space maintenance program (Variant 4).

## Process: Discontinuing an Article

### Purpose

This process corresponds to the business process scenario: [Variant 5: Discontinuing an Article \[Page 28\]](#).

### Process

1. Discontinue the article in R/3 via the Assortment component.
2. Work items are generated for every combination of layout module and store containing the article.
3. When the work items are processed, Workflow Nr. 20000053 is executed.
4. Decide whether article data is to be displayed prior to export or not.
  - Direct export (no display of data beforehand)
    - Function module **planogram\_data\_read** selects the articles relevant for export, along with the corresponding master data and movement data.
    - The system checks the space management profile in Customizing to locate the space management program, then exports the data.
  - Display of data to be exported:
    - Function module **planogram\_data\_read** selects the articles relevant for export, along with the corresponding master data and movement data.
    - The Listviewer displays all articles assigned to the layout module in question (assuming they have the correct listing and sales validity dates).
    - The system checks the space management profile in Customizing to locate the space management program, then exports the data.
5. The space management program calls the read BAPI **Bapi\_SiteLayMod\_GetItems2**. The BAPI uses the function module **planogram\_data\_read** to retrieve the layout module data from the buffer and copy it to the space management program. (The space management profile in Customizing determines which data will be selected.)
6. The space management program calls the posting BAPI **Bapi\_SiteLayMod\_Change**. This posts the data to R/3.



There are two user exits should you wish to insert your own custom export function modules. These occur after the read BAPI **Bapi\_SiteLayMod\_GetItems2** has run and prior to the execution of the posting BAPI **Bapi\_SiteLayMod\_Change**.