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SpaceMan

Space Management Software

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Chapter 1 Getting Started

General Information

The method for allocating rentable space to the tenant. Incorporating all facilities within the building to increase gross RSF pricing. SpaceMan integrates space-related data to floor plans so that you can produce graphic representations of their data in an easy-to-use and cost-effective way. The end result is that users of space-related data are no longer dependent on computer specialists to produce sophisticated graphics such as color-coded floor plans.

In addition, SpaceMan provides powerful tools that calculate available square footage; derive available square footage for a new or existing building; or to demise space and obtain the available square footage for the demised space. There are many applications for these tools such as "gaming" a property, "growing" a building's rentable square footage (RSF), or obtaining instantaneous RSF calculations as part of the leasing effort. SpaceMan is flexible in the methods that you can use to calculate a building RSF. Essentially you can use any formula or method that suits your properties needs.

SpaceMan uses an industry-standard relational database, Microsoft's Access, for storing and retrieving data. This allows you to work with data created by any third party package that can be uploaded into an Access database file.

Please note that although the examples we use are for an office property, the same procedures apply to retail and industrial floor plans as well. We use an office property because it best represents the features that SpaceMan offers.

PlanData's Services

Most companies use PlanData's SpaceMan software services for extensive space documentation of their properties. These services range from converting existing CAD files into SpaceMan; producing the CAD files for your company; field measuring properties; or document the tenant partitioning of space to help in the leasing effort. If you would like more information on these services, please contact PlanData at 1.800.757.BLDG or visit us on our Web Site.

Platform

SpaceMan is a 32 bit Windows based application program and will run on either Microsoft Windows <u>95/98/NT/2000/XP</u>. To run SpaceMan, double click on the PlanData logo icon that was installed to your desktop. If you encounter difficulties, please contact PlanData at 1-800-757-BLDG

Minimum Hardware Requirements

Due to the fact that SpaceMan is a graphic application, the more power your computer has, the better. Almost equally important is the availability of RAM. The minimum requirements for running SpaceMan are:

Pentium Processor

64 MB of RAM required (128Mb recommended)

Up to 30Mb of hard disk space for installation

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Logging On

SpaceMan requires a User ID along with a password. Your System Administrator can set up your access.

User ID: XXX

Password: XX

SpaceMan Editions

- > SpaceMan/Professional Full working version.
- SpaceMan Full function except user can not save work back into main database.
- Demo can not save anything and is limited to the projects OFFICE, OFFICE TOWER, RETAIL, PROTO and INDUSTRIAL.

For further information on user rights see section on Administrative Rights.

SpaceMan Licensing

When you buy a copy of SpaceMan from PlanData Systems, you are issued a license ID and a serial number. Every time SpaceMan is opened the license ID and serial number are checked. If they are not valid, the program will open to the demonstration mode only.

Terms and Standards

Attribute

An attribute refers to the characteristics of a specific type of data. For example: if PlanData Systems <u>Corp.</u> were the data entered, an attribute of PlanData would be a phone number, an address, or any other characteristic.

Data Menu

A data menu appears when you place the cursor on the floor plan and right click. The selections listed on the data menu are called data tables.

Data Tables

Data tables are used to display and edit information stored in the database. Click on any of the selections listed on the data menu to open a **data table**. You may edit the listed records that are attached to this space

Field

It is an individual element of data.

Input Screens

Input screens are used when adding or modifying data. These screens are designed to be user friendly, to make their use as easy as possible. We have incorporated drop down lists when we require particular values in a field to further extend ease of use. Input screens are used when adding or modifying data.



List Boxes

List boxes are provided whenever the system uses a pre-determined selection. Click on the drop-down arrow, located next to the text box to display the selections. When the appropriate choice is highlighted, click on \underline{OK} . Click on the <u>Cancel</u> button to escape from making changes, and you will return to the previous screen.

Record

Record is a group of fields (grouped by some similarities).

Relational Database

A Relational Database is a set of tables, grouped by similarities and associated by common references between them. For our purposes, when we use the term "database" we are referring to a relational database.

Table

Is a grouping (or set) of records. Think of a table as a matrix that has fields as columns and records as rows. Also sometimes referred to as a "file".

Using the Keyboard for Menu Commands

While using the mouse is the most convenient method for selecting SpaceMan functions, alternative keyboard commands are provided. Ex. Press Alt + F to open the <u>F</u>ile menu

Using a Mouse in SpaceMan

In this section we will discuss how the mouse is used within the SpaceMan software. The manufacturer, upon installation of the peripheral, provides standard configuration for the mouse.

The Left or Right mouse "Click"

SpaceMan uses the left button on your mouse as the selection button. By convention, throughout this documentation we will refer to the left mouse click as a "**click**". You will be asked to make selections with either a "**single**" or "**double**" click.

Alternatively, you may be asked to "**right click**" to perform certain actions. Use the right mouse button when directed.

The Data Retrieval/Cancel Button

Use **right click** to retrieve information about spaces on the floor plan. Place the mouse pointer on the selected room, <u>rights click</u> the mouse, <u>and pop</u>-up menu will appear. Selecting different items from the menu will allow you to assign or receive information about that particular space.

A **right click** is also used to cancel the mode you are currently working in. E.g., if you are in the middle of adding a label to a space, right click will exit from that mode.

Pull-Down Menus

Pull-Down Menus are hidden under each of the main menu bar selections. Click on one of the menu selections to view a list. Each command on the list has a corresponding alternative keyboard short cut. Press Alt + the underlined letter of the list selection. To close a list, press the **Esc** key or click off the bar.

To work with a pull down menu:

Place the cursor on the desired menu bar selection.

Scroll down the list to highlight the desired function.

Follow the directions in the dialogue box provided.

Backing up Data

It is advisable to keep data on your system on "removable media." Copies should be kept on something other then your hard drive in the event something happens to your

system (i.e. your hard drive <u>fails</u>). Discuss backing up your files with your System Administrator for standard procedures. Most organizations have guidelines for backing up data. Different organizations have different hardware available for these operations.

As a security measure, administrators are given the rights to backup both the SpaceMan drawings and the database. When an administrator wants to backup work, they must save the entire directory since a project is a directory.

See Defining User Privileges/Administrative Rights

Viewing Space-Related Data

The single-most important aspect of SpaceMan is its ability to connect data to floor plans in an easy-to-use fashion. This allows you to use the floor plan essentially as a menu for viewing data.

Viewing or Editing Data

SpaceMan has the ability to track a large amount of information assigned to a space and allows you to view, add and modify space related information.

To view or edit the data that SpaceMan has stored about a particular space:

- 1. Place the mouse pointer over the desired space and right click (the space should become highlighted).
- 2. From the list box select the table you want to view, add or edit including attaching documents such as excel, word files, etc. (**Note** that the check mark indicates that data has been entered. When no check mark appears you will be adding data for the first time.)
- 3. Review/modify the information in the table.
- 4. Click on Close or press Esc to return to the drawing.

Drawing Terms and Conventions

Select from the list a term to view its definition and the action you may perform.

Projects

Projects are groupings of buildings and/or properties. Projects are important for setting up your system, and running reports. Projects help you define the summaries for "rolled-up" reporting. You can use this feature to group properties that share a site (i.e. a campus-style property), or you can use it to group properties in a given region or portfolio. This is the highest level of the hierarchy of data. SpaceMan creates a sub-directory (folder) for each project. All data files for the project exist in that sub-directory.

Buildings

A Building is a structure that consists of multiple floors. A project can contain any number of buildings.

<u>To View File</u> <u>To Generate Reports</u> <u>To Create Graphics</u> <u>To Creating a New Project</u>

Floors

Floors are within a building.

Scenario Files

SpaceMan allows you to create Scenario Files. A Scenario File is a copy of the original CAD file, with all related database records for the project, property, building or floor. Scenario files can be used to test some ideas with respect to the drawings, such as demising partitions, etc. It is important to note that this information can not be merged back into the main database.

File Naming Convention

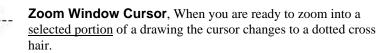
SpaceMan uses the **S_M** extension for master files and **SMS** <u>extension</u> for scenario files. Do not try to modify these extensions yourself, or otherwise these files will <u>become</u> unaccessible from SpaceMan. There are no other limits on file names.

Cursor Types

SpaceMan uses a variety of cursors depending on the task being performed or the mode you are in. The following is a brief description of each cursor type.

Note: To cancel out of the specific mode or operation, simply press the **ESC** (Escape key) or **right click**.

The Cursor, This command mode allows you to perform the most basic operations of the system (pulling-down menus, selecting icons, etc.). The **Cursor** is most prevalent one used in SpaceMan and is used during the command mode.



Draw mode Cursor, When you enter the graphic mode, the cursor changes to a cross hair. In this mode you can add/modify certain graphic elements of the drawing (i.e. adding a boundary line).



(m)

Edit Cursor, When you are in the edit mode (i.e. when changing assignment information), the cursor becomes a hand holding a pen.

Move cursor, When you move text or assignments the cursor will become a pointing hand. This makes it possible for you to specify the location that you want to move the information from and the location

that you want to move the information to.



Add/View Pictures Cursor, When you select either <u>Add</u> or <u>View</u> Pictures from the <u>Pictures</u> pull-down menu, the cursor will become a camera. To add a picture, place the cursor approximately where the photograph was taken with the camera cursor. The Add Picture screen will appear prompting for information. If you want to view a picture already referenced in the database, point to one of the camera symbols on the screen using the camera cursor, and the photograph will appear on your screen.



X

Delete Cursor, When you are in the graphic mode and the cursor changes into a target symbol, you can delete graphic elements (i.e. walls, assignments that are no longer desired).

Hourglass Cursor, This cursor type appear when the system is busy performing some task. Generally you should wait until computer is done with its task and cursor returns back to the standard type.

Opening/Retrieving a Drawing

In this section we will view some of the options associated with opening floor plans.

Show File Descriptions check box

Show file descriptions gives you the option to view detailed information SpaceMan stores about a building or a floor plan. You may find this more <u>convenient</u> then referring to files names that the system uses. We will discuss building and floor plan descriptions in later chapters, specifically in Advanced Functions.

Show Scenario Files check box

Check **Show Scenario Files** box to display the list of scenario files (*.SMS) in a project. Uncheck it if you want to see master files (*.S_M).

Selecting a Building / Floor

The list of available projects is dispalyed on the left-hand side of the form, the list of floor plans in the selected project is displayed on the right-hand side.

To select a floor plan to open, select a project on the left side, then select desired floor plan on the right. To open highlighted floor plan, click the **OK** button or double click the floor plan.. SpaceMan will display your floor plan in the drawing window.

The Drawing Window and Default View

By default, SpaceMan will open a drawing window with the entire floor plan displayed. This window allows you to perform drawing tasks. You can change the current view and zoom factor by selecting one of the magnifying icons, located on the tool bar.

Chapter 2 Command Reference

The main menu bar spans the top of the Spaceman Window. The selections to functions within the program are grouped in pull-down menus under each of the main menu selections. Click on a menu bar selection to view a pull-down list.

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Contains general management commands such as; opening and closing drawing files; exiting the program; printing drawings; and configuring the system.

New Project

Creates a new project directory. You can only select New Project when there is no project open.

See section "Creating a New Project"

New Drawing

Creates a new SpaceMan drawing.

Open Drawing

Allows you to select a drawing to work on.

<u>C</u>lose Drawing

Allows you to close the drawing that you are working on. SpaceMan will prompt you to save changes to the drawing before closing.

<u>S</u>ave

Saves the current drawing.

Save <u>A</u>s

Allows you to save the current drawing under a different name, or in a different directory.

<u>P</u>rint

Opens the "Print Preview" dialogue where you will be able to select printer, setup printing options, and print out the floor plan.

Set<u>u</u>p

Selecting Setup will bring the form to help you to configure your system. It contains five tabs that you can click on in order to alter different aspects of the SpaceMan software.

Click on **Setup** from the **<u>File</u>** pull-down menu. When you click on one of the tabs located in the System Setup screen it will be pulled to the front so that you can work on it.

Utilities

This option on the **File** menu only appears when there is no drawing open in the system. The options given under **Utilities** are:

Import Data.

In order for SpaceMan to display the most accurate and timely information, SpaceMan allows you to import data from other sources (i.e. from your property management accounting systems, etc.). For maximum flexibility, SpaceMan has many different methods for importing data, which varies based on the source and type of data that you plan on importing

Print Utility

This command allows you to select the drawing you would like to print and determine its color-coding scheme. Select the **Color Code** tab to choose the color-coding. More than one type can be selected by holding down the **Control** key and choosing the types you want. Press **print** when you are ready.

Create Scenario Utility

This command, allows you to select files for scenario creation. You can choose from those listed on the **Existing** tab, or those given on the **recent** tab. When done, press **Create**.

Backup Project

It is always a good idea to periodically backup a project. This command creates a backup (zip file) of your project files. It is recommended that the user select all three file types (database, SpaceMan files, and CAD drawings). **Note:** Scenario files are not to be backed up.

Restore Project

This option restores a project backup created using the **Backup Project** command. All files will be restored to the selected directory even if they resided in different locations when the backup was created. If the file being restored exists, the user will be prompted to over write.

Repair Database

If you try to repair a database because it corrupted for some reason (i.e. power failure) and you can not open it in SpaceMan, open the sample database shipped with SpaceMan, go to **the Utilities menu** > **Repair database**, and select **suspect database**.

Compact Database

This command reclaims unused space within the database, resulting in a smaller file size. Compact Database is a Microsoft Access Utility.

Options on the System Tab:

The system tab allows you to modify the default display settings of your drawing.

Turn on or off the layer function.

Change how a Reference CAD file is displayed.

Change the colors of items in the floor plan.

The hatch scale refers to the distribution of space allocated between gradation lines when you divide a space.

Add extra length to boundary lines drawn in.

Print timestamp on B/W drawings

Label Leaders will allow an assignment to be moved outside a delineated space and a line leader will be automatically be drawn.

Boundary Dimensions can be displayed automatically.

Change how SpaceMan displays text with different fonts.

Options on the Drawing Tab:

Select the underlying CAD file for your SpaceMan floor plan.

Select the unit of measurement for your drawing so that SpaceMan can calculate the area.

Select the underlying CAD file for your SpaceMan floor plan.

Select the unit of measurement for your drawing.

Determine the unit of measurement for the CAD file.

System Drawing Directorie	s DDE License
Reference CAD File © Display in Color Display in Black D on of Display Color Palete © [PlanData] AutoCad Custom	Colors Co
Default Values Convert line extra length, inches 0.0 Hatch scale, X Date window 4 30 Status bar field (e.g. Leases.Ten LeasableSpaces.baseLab	Image: Highlight picture symbols year Image: Show hints in status bar Image: Show hints balloons ant) Image: Warn when CAD file changes
Boundary Dimensions T	ext Height Threshold 30 60
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Options on the Directories Tab:

Specify the <u>default directories</u> where SpaceMan stores projects, CAD files, pictures, reports, temporary files and security database.

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Options on the DDE (Dynamic Data Exchange) Tab

This screen allows you to setup parameters for SpaceMan to exchange data with other Windows programs that support DDE. If this option is enabled, SpaceMan adds the name of the program to establish DDE conversation with to the data menu which pops-up when you right-click on a space. The specified program will automatically start and receive in specified form (topic), and in specified controls (item 1 and item 2) project name and lease ID of the selected space.

PlanData Systems uses this feature to enable communication between SpaceMan software and LeaseMan software. If you are interested in connecting SpaceMan with any other software package, please contact PlanData Systems.

Options on the License Tab:

The **License** tab allows you to enter your license ID and serial number. You can also view access rights of a current user.

<u>Export</u>

Allows you to copy the graphic image to a text file or to export the SpaceMan entities into an AutoCAD .DWG file.

To Copy Screen Image to Clipboard:

Zoom to the area you want to copy and select File/Export/Copy Screen Image to the clipboard. All visible in the window floor plan area will be copied to the clipboard. You can switch to another application (e.g. MS Word, Excel, etc.) and copy image into the document in that application. Generally, you will be able to do this by selecting **Edit** > **Paste** or by pressing Ctrl-C in that application.

Your selection will remain on the clipboard until you replace it by copying another

Create Bitmap file

Allows you to save a bitmap image of the current SpaceMan file.

Write SpaceMan Entities to DWG file

Allows you to save all SpaceMan entities as AutoCad drawing.

Write EMF file

Allows you so save an EMF file of the current SpaceMan file to disk.

View

The **View** pull-down menu contains various commands that enable you to move and size your drawing window. Icons on the main tool bar represent shortcuts to each of these commands.

Viewing SpaceMan Drawings

SpaceMan opens a drawing considered the default view. This view is set to allow you to see the entire floor and any title information that is associated with the drawing. Many times, this is not a practical way to work with the drawing since it would be very difficult to accurately select elements in the drawing at such a small scale. For this reason, SpaceMan has tools that allow you to enlarge areas of the drawing as well as ways to move around the drawing

Zoom <u>I</u>n

The zoom in command is used to enlarge the center of your screen by 50 percent. This command reduces the scope of the area that you are viewing so that you can see a detailed portion of your floor plan. Go to **Zoom In**, located on the <u>View</u> pull-down menu or click on the zoom in icon . Zoom in allows you to enlarge the floor plan in 50% increments.

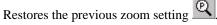
Zoom <u>O</u>ut

The zoom out command reduces the screen by 50 percent. Use the zoom out tool to extend the field of vision on a floor plan. Go to **Zoom Out** located on the **View** pull-down menu or click on the zoom out icon \square .

Zoom <u>A</u>ll

Allows you to see the entire floor plan in the default view.

Zoom Previous



Zoom <u>W</u>indow

Allows you to zoom in on a specific portion of the screen.

The zoom window command is used to zoom in on an area (or window) that you define. To start this command, select $\underline{\text{View}} > \text{Zoom } \underline{\text{Window}}$ from the menu bar pull-down menu or click on the zoom window icon, then select area to zoom and right click.

The status and helpful hints bar at the bottom of the screen will say, "Enter corner point." To select the portion that you wish to enlarge, you must create a window (or box) that defines this area.

To work with the Zoom Window:

- 1. Click on the 📿 Zoom Window Icon.
- 2. Click while positioning the cursor on the corner of the area that you wish to enlarge.
- 3. Drag the cursor diagonally to the opposite corner of your selection. You will see a box expanding around the area of your selection. When you capture the area, click again.

SpaceMan will redraw the screen, showing only the area that you captured for view.

To return to the original view, go to the <u>V</u>iew pull-down menu and select **Zoom** <u>Default View</u> or click on the V default view icon.

Zoom Default View

PlanData set the default view in order for you to view the entire floor plan or any area of your interest. Please note that when a floor plan is open the first time, the default view is chosen to allow user to see all entities on the floor plan.

To work with Zoom Default View

Select **View** > **Zoom Default View** from the pull-down menu or click on the \overrightarrow{Q} Zoom default icon.

Layer Manager

Allows you to see different combinations of layers of the CAD & SpaceMan files.

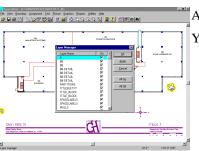
You use the Layer Manager command to:

- Make individual layers, ranges of layers or all layers to be displayed or hidden on the screen.
- Restore initial displayed/hidden state of the layers.

This command is used to control which information in the reference file (CAD) is displayed. To turn a Reference layer on or off, select <u>View > Layer Manager</u> from the menu bar **or** click on the \rightleftharpoons Layer Manager icon.

The Layer Manager box appears on your screen. Check On column for the layers that you want to see, and uncheck it for those you do not want to see. Click Apply button if you want to see the changes in the display without leaving Layer Manager, and OK if you want to apply changes and close Layer Manager.

Alternatively you may hide a layer by clicking on **Utilities > Show Entity Layer**, then select on the screen a line that belongs to the layer you want to turn off. A dialogue box will pop-up asking if you want to hide this layer, select Yes.



<u>Pan</u>

This command will allow the user to move around the drawing by sliding the current display around.

Redraw Screen

Redraws the screen, without changing the view.

This command is used to redraw your current screen. You may notice that sometimes your drawing contains small lines (or marks) left over from deletions. If you redraw the screen, these marks will disappear. To redraw your screen:

Select <u>View > <u>R</u>edraw Screen</u> from the menu bar or

Click on the Redraw magnifying glass 🔍

Regen Screen

Regenerated all entities on the screen display. Generally, Regen will take longer than Redraw, but will completely rebuild the view of the drawing you work with.

Set Default View

A default view is the view that you see when you open the drawing or when you click on the default view icon. You can set the default view 2 ways:

To set Current View:

Prints the same view of the drawing that you see on the screen.

To set By Window:

- Set by window allows you to select a partial area of the drawing to use as the default view. For instance, if you spend most of yout time working on the specific area of the drawing, you can set this area as you default view.
- 1. Select View > Set Default View > By Window from the menu bar.
- 2. Click to set a starting point for the cross hair cursor.
- 3. Drag the cross hair cursor over the area you want to set as the new view.
- 4. Click again when you have captured the area within the box.

To set By Coordinates:

- 1. Select **View > Set Default View > By Coordinates** from the menu bar.
- 2. Type the X min and X max coordinates.
- 3. Type the Y min and Y max coordinates.
- 4. Click OK.

Set Default V	iew	×
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101 100	Xmin	X max
	-184'-0 1/2"	100'-3 9/16"
	Ymin	Ymax
	-63'-10 1/2''	109'-6 3/4''
	<u>0</u> K	<u>C</u> ancel

Symbol Origins

Places an X symbol at the origin point of all symbols in a CAD file. E.g., a typical symbol used in drawings would be an I-beam used for a column. When symbols like these are built, the origin is normally placed on the column center. Symbol origins allows you to determine a insertion point of a symbol.

Boundary

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Accuracy Tool Bar



Add Boundary Convert CAD Entity The selections on this toolbar will allow you to be very precise in the placement of boundaries. Below is an explanation of the icons displayed on the Accuracy Toolbar.

<u>A</u>dd Boundary

File View Boundary Assignment Lext Picture boundary icon, SpaceMan will display the Accuracy Tool Bar.

Convert CAD Entity

This feature allows you to convert lines from your reference file to SpaceMan boundary lines. This is a quick and easy way to draw SpaceMan lines using CAD entities as a reference.

Single<u>L</u>ine

Select a line in the background CAD file line and SpaceMan will add its own line to the drawing. Sometimes it is convenient to have extra length added to a converted line, to have it "extended". To do it, make sure before converting that you have extra length specified in **File>Setup >System Tab>Convert line extra length, inches**.

From your Menu Tool Bar

Select Boundary >Convert CAD Entity > Single Line.

From the Accuracy Toolbar

Select Snap to CAD Entity Icon is then the Convert Single CAD Line . SpaceMan will add this length to both ends of CAD lines when converting them. If you do not want to have extra length added, set extra length to **0** in **Setup**.

Lines in Window

Select a window with CAD lines you want to convert. SpaceMan will find all CAD file lines with both ends within the selected area and convert them. If line extra length is set, SpaceMan will ask your confirmation to proceed, convert all lines, and then "extends" them.

From the Menu Tool Bar

Select Boundary >Convert CAD Entity > Lines in Window.

Line to Centerline Wall

This feature is especially helpful if you have two parallel lines that represent a wall thickness in your CAD reference file, for which you want to demise the space to the centerline of that wall. Zoom into the two parallel lines then select one of them. SpaceMan will add a centerline between them, and if extra length is specified, it will extend it.

From your Menu Tool Bar

Select Boundary >Convert CAD Entity > Lines to CenterLine Wall.

From the Accuracy Toolbar

Select the M Snap to CAD Entity Icon then

select the Convert CAD Lines to Centerline 💻

<u>A</u>rc to Lines

Since SpaceMan works only with lines it will approximate CAD arcs to a number of straight lines; the more lines the better the approximation.

From your Menu Tool Bar

Select Boundary >Convert CAD Entity>Arc to Lines.

Select an arc from the CAD reference entities. SpaceMan will calculate a recommended number of lines and ask whether you want to proceed with it or set another number. Once the number is set, SpaceMan will add lines approximating to the selected arc.

Edit Boundary

The **Edit Boundary** command allows you make minor changes so that you don't have to delete and recreate a boundary. The Edit Boundary Parameters box allows you to decide which layer the boundary belongs to, and determine where that boundary begins and ends. You can toggle between the **Defines area** and **will be printed** functions for a particular boundary by clicking on the appropriate radio button. If you designate a boundary **as not able to define area**, the boundary will become a dotted line.

Edit all Boundary's allows the user to change all spaceman lines to Set All Printable, Set All to Non Printable and Set All Widths.

Trace Boundary

This diagnostic tool helps you determine where partitions do not close by tracing the outline of a space. For example, You created a wall, and now you want to calculate the area. When you right click for calculations on the area, SpaceMan does not recognize the newly created space. The new boundary doesn't completely close the space. Trace Boundary will help you determine where the break occurs.

To Trace a Boundary:

- 1. Select **Boundary > Trace Boundary** from the menu bar.
- 2. Position the cursor in the area that you want to check.
- 3. Click within the space.

SpaceMan will begin tracing the intersecting boundaries until all connecting boundaries are highlighted. Boundaries not highlighted are not connected. Close the space with the Add Boundary tool, then right-click to recalculate the space.

Delete Boundary

Deletes a boundary from the drawing. If you accidentally delete a boundary that you want in the drawing select **<u>Undo Last Delete</u>**, and it will reappear.

Delete Nibs in Window

Deletes boundaries that do not start and end on other boundaries. This command is recursive; you should save your file before using it.

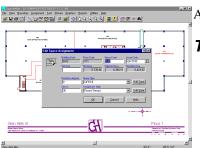
Delete Boundaries in Window

Deletes all boundary lines within a window that you specify.

Undo Last Delete

Will recover items accidentally deleted.

Assignments



Add Assignments

Assigns data to the specified space in the drawing.

To Add Assignments:

From the Menu Bar.

- Select Assignments > Add Assignments from the Menu Bar or left-click on the Add Assignment Icon P.
- 2. Select the space you want to Add an Assignment to.
- 3. You will see a dialog box.

Convert CAD Assignments

Adds a space assignment or a group of assignments to the drawing. Rather than pointing to the location and entering the space ID, you enclose the multiple pieces of text within a window in the CAD reference file. SpaceMan will add the assignments using the text value as the space ID. If this function does not work, see $\underline{\mathbf{Explode Symbols}}$ from the $\underline{\mathbf{Utilities}}$ pull-down menu.

Edit Assignment

Allows you to change the label parameters (such as size or style) of a selected space.

Edit All Assignments

Like the edit function described above, but changes the labels for all of the spaces on the floor plan.

Move Assignment

Allows you to change the location of a label by clicking on the space label that you want change and then clicking to the new location for the label.

Delete Assignment

Allows you to change the location of a label by clicking on the space label that you want change and then clicking to the new location for the label.

Deletes a label from the drawing. By removing a label from the drawing, you are breaking the link between SpaceMan and Access for that space.

Delete Assignments in <u>W</u>indow

Deletes all assignments within a user-defined window.

Recalculate Area

Recalculates the Rentable Square Footage for the floor.

Show Area

Displays the net, adjusted, and chargeable area of a selected space.

Show Assigned

Highlights all the stores that have been assigned labels. To clear, click on $\underline{\mathbf{R}}\mathbf{edraw}$ Screen.

Show Unassigned

Highlights all the stores that have <u>not</u> been assigned labels. To clear, click on **<u>R</u>edraw Screen**.

Text

Allows you to add, edit, move or delete text. Text is displayed on the screen; it does not affect the database.

Note: The difference between text and assignment information, assignment information links a space to the database, while text is written material located on the screen that is not linked to the database.

To <u>A</u>dd Text:

Go to the **Text** pull-down menu, and select **Add Text**

The cursor will change to the edit cursor.

Click on the area of the drawing where you would like to place the text.

The Add Text screen will appear. From this screen you can:

- Load a text file.
- Select a typeface, bold and/or italic.
- Select text alignment, left, right or center justified.
- Choose the size and rotation of the text.

Type the text that you would like to appear in the text box provided.

When finished, click on the OK button and the text will appear. If you decide that you don't want to enter text, click on the **CANCEL** button.

Show Text

Allows you to toggle between viewing the added text or not.

Edit Text

Allows you to edit text in the drawing. Click on the text you want to edit and the dialogue box will appear. Make your changes and click **OK**.

Move Text

Allows you to move text from one location on the drawing to another.

Delete Text

Allows you to remove text from the drawing.

Delete Text in Window

This command will delete all text within a user-defined window.

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Picture

SpaceMan gives you the option to link photographs of a building site, floor plan, interiors, and views to your database. To enhance presentations you can view these photos to clarify information. This is achieved by linking a photographic view to a camera icon which you can place in a drawing. This icon can be rotated so that the user knows the perspective from which the photo is taken.

The Aerial icon – signals a picture taken from above and usually used for maps.

The Camera icon – used for regular pictures attached to the floor plans

Show Pictures/Hide Pictures

The menu selection allows you to toggle on and off displaying camera icon on the site plan. When switched on you can view camera symbols in preset locations.

View Pictures

Allows you to view actual building photographs assigned to a selection on the drawing.

To view a picture:

If View Pictures appears inactive, click on Show Picture Symbols to activate the View Picture menu selection.

Click on View Picture to change cursor to the camera icon. Or Click on the icon located on the tool bar.

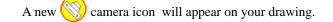
Click on one of the pre-set camera icons () on the drawing to view the photograph.

Click close picture to return.

Check the Aerial Picture box to add a site aerial view.

To <u>A</u>dd a picture:

- 1. Click on Add picture
- 2. Place the camera cursor on the location for which you are adding a view.
- 3. Click to place a camera icon () on the drawing.
- 4. Select a file name from the drop down list.
- 5. Type a comment in the text box provided.
- 6. Select a camera angle you want to appear.
- 7. Click OK.



To Delete a Picture:

- 1. Click on delete picture.
- 2. Place the target icon on the camera you want to omit.
- 3. Click on the camera.

Graphics

Generating Graphics

The color graphics within SpaceMan are designed to turn complex masses of information about a building into immediate insight. To print these graphics you need a color printer - a HP 2000C is recommended. If you do not have one but would like a color printout of the graphic, PlanData can produce it for you.

The Graphics pull-down menu offers the following commands:

 \underline{C} olor Code Plan, Cl<u>e</u>ar Color Codes, <u>B</u>uilding Pie Chart, <u>P</u>roject Pie Chart, <u>F</u>loor Pie Chart and Building <u>S</u>tack.

Color Code Plan

Color Code Plan allows you to decide how do you want to view your floor plan, and how it will appear on printed documents. You may color-code any of the data that resides on the database of your floor plans. For example, you can color code for Area Types, Income, Lease Expiration, and Options.

Each type is assigned a range by default. For example: the rent color-coding may start with SF increment of \$0-\$5/SF. These rent ranges may not be comparable to your specific company allocations. The default settings may be changed for a realistic allocation that your company uses.

To Setup your Color Codes:

- 1. Click on Utilities> Administration, located on the main menu bar.
- 2. Select the **Edit Lookup Table** button, from the Administration dialogue box.
- 3. Select the Table Type you want to chang the ranges for. SpaceMan is an intuitive program, which allows you to apply skills acquired from one lesson to perform other similar tasks. For this objective click on the the Rent Lookup table. Your screen will be similar to the one shown.

Lower	Upper	Name	Sortorder	Force_to_legend	Fg_colo *	COLOR
0	1	No Rent	1		1	
1	6	< \$6/SF	2		9!	
6	8	\$ 6-8/SF	3		8:	
8	10	\$ 8-10/SF	4		8:	
10	12	\$10-12/SF	5		1:	
12	14	\$12-14/SF	6		1	
14	16	\$14-16/SF	7		1:	
16	18	\$16-18/SF	8		1	
					•	
_						

For this example you will change the **Lower** and **Upper** Values for rent SF allocation, then choose a new color from the color palette. Begin by reviewing all the values. Notice that increments are sequential and a change in one field will have an affect on other fields. Only those fields of actual income will display on the legend and color coded floor plan.

- 1. Click on a Lower value field. The number will highlight. Type in the new range value.
- 2. Click on an Upper value field. The number will highlight. Type in the new range value.

To change the legend colors, click on one of the color keys to the left of the box. The palette will open where you can select a new color. Click **OK**. Each of the fields in this dialogue box may be modified to your criteria. Changes in the Rent Lookup table will affect the ccIncome legend.

Close all the dialogue boxes to return to the main drawing.

To Color Code Floor Plans:

To produce a color-coded floor plan: (spaces on the floor plan must be assigned before using this feature.

Select <u>Color Code Plan</u> from the <u>Graphics</u> pull-down menu or click on the Tri-colored **Plan** PlanData logo icon.

Select a category type, then click on the \underline{Ok} button.

The drawing will color code and a legend will be created on the right hand side of the screen.

To print the color-coded floor plan:

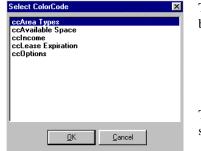
- 1. Select **Print** from the **File** pull-down menu or click on the print icon.
- 2. Send the drawing to the printer.
- 3. Click on the **<u>P</u>rint** icon =.

To Clear Color Codes:

This feature removes color-coding from drawing and returns you to command mode. Undo color-coding by selecting clear color-code, or click on the clear color code icon, 📝 located on the main tool bar.

	\$14-16/SF	
1	6,424 SF 30.17%	
ł	\$16-18/SF	
	10,316 SF 48.46%	
	>\$20/SF	
	1,995 SF 9.37%	
-		

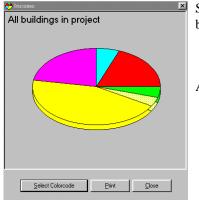
2 553 SE 11 992



Project Pie Chart

Creates a pie chart based on specified information for all properties within a project.

To create Charts:



SpaceMan can generate graphics based on either the floors of a building or all of the buildings in a project. To create a graphical chart:

Select Project Pie Chart, Building Pie Chart or Building Stack from the Graphics pull-down menu.

A list of predefined formats will display.

Select the types of data you want to graphically represent then click the **OK** button.

To Print the graph:

Select **Print**, and the Send Drawing dialogue box will appear. You can add comments to your graph, and choose whether to send the drawing to the printer or to a file.

Click on the **Print** button located on the Print form that appears on your screen.

If you don't want to print the chart that you are viewing, select the <u>**Cancel**</u> button to return to the floor plan <u>B</u>uilding Pie Chart

Building Stack

Creates a stacking diagram based on specified information regarding the current building.

To create a Building Stack:

- 1. Select **Graphics** from the main menu bar.
- 2. Now select **Building** > **Proportional Stack** or **Aligned Stack**.



Reports

This feature is used to generate reports based on data in the database and display it on screen or print out on printer.

SpaceMan allows you to print multiple reports at the same time eliminating the need to view them individually.

Report on Current Drawing

The Report Tab:

Select **<u>Reports</u>** from the Main Menu bar, and click on <u>**Print Reports**</u>. (Or click on the Reports icon.)

Click on the tab titled Report to select the type of the report that you want.

Notice that you can select one or more reports to print at once, by click on the box next to them or selecting <u>All</u>.

The Selection Tab:

Click on the tab called Selection to choose which building, floor and unit you would like the report to describe. Note: Make sure that the highlight bar is on the desired report when setting the selection criteria.

The Setup Tab:

Choose this tab to enter headers and footers for the report.

The Print Report button:

When you are finished setting up your reports, click on the **<u>Print Report</u>** button located on the bottom of the Reports screen. Click preview to view the actual report, before it is printed. Click on the print icon, located on the main tool bar of the Report Preview screen.

Report on Project

Allows you to select the Reports and a destination you want to view them, from the database.

Report on Portfolio

The Report Preview screen appears. From this screen you can tell SpaceMan were to send the report — a printer or a file. To send the output to a printer, click on the printer icon. To send the output to a file, click on the export icon. To zoom in or out of the document on the screen, click on the screen icon.

Utilities

Allows uses to access various functions such as editing data directly in database tables, finding records, working with area statistics, etc.

Find Records

Allows you to create and run basic queries, and then view that information with graphically.

To work with the Find Records dialogue box:

- 1. Click on **Utilities** > **Find Records** from the menu bar.
- 2. Select the query options using the drop down arrows provide for each box.
- 3. Click on the <u>A</u>dd to List button. Your query will post to the Selection List.
- 4. Click on the **View Records** button. The Results of query dialogue box will open with your records.
 - Select **Find** to enter a new query.
 - Select **Show on floor** to see a color-coded representation of the query.
 - Select **Close** to exit the dialogue box.

Click the **Clear Selection** button to empty the list.

Click the **Delete** Item from List button to omit an entry.

Click the **Close** button to exit the dialogue box.

Edit Data Files

Opens the View Data Files dialogue box where you select the option to edit. Scroll through the list and highlight the data field you want to edit. Click **OK**. Tab through the fields to change the attributes.

View Area Statistics

Opens the Floor Area Statistics dialogue box. This dialogue box allows you to change the attributes of calculations assigned to a building.

Measure Distance

This menu item will calculate the linear footage of a given line.

To Measure Distance:

- 1. Select Utilities from the menu bar.
- 2. Select Measure distance to view the cross hair cursor.

- 3. Click on two points for a calculation of the linear footage.
- 4. Right click to end selection, and view the linear footage.
- 5. When finished click **OK** to clear the dialogue box from the screen.

Show Entity Layer

This menu selection allows you to click on an item within the floor plan to determine its layer, and, as an option, hide that layer. To clear the drawing of unwanted fixtures, columns, partitions, etc., and visually uncluttered your work, use the cross hair to make your selection.

To undo selections, select **View** > **Layer Manager**, from the menu bar. Scroll through the list on the Layer Manager menu and highlight the layer you want to return. Click the Light bulb icon, and your item will return. Layer Manager is another option to select view/hide for layers.

Explode Symbols

Break symbols down into basic graphic elements. If you are trying to use one of the convert functions, and the function does not work properly it is probably because the graphic element is a part of a symbol. Try issuing this command. Once symbols are exploded, they will remain exploded until you exit and reload the file. While symbols are exploded you won't be able to use symbol insertion points in the drawing mode.

Shift Floor Plan

For various reasons, the SpaceMan file may shift away from the CAD file on a drawing.

Delete CAD Entities

By selecting this command from the Utilities menu, you can delete what SpaceMan displays of the CAD file. However, this is temporary for the current session only. SpaceMan does not make any changes to the CAD file at all. If you find that there are entities in your reference CAD files that you do not want displayed, please contact your PlanData representative for solutions.

Check Drawing

Will open a pop-up, which informs you of all unassigned space and the square footage.

Administration

SpaceMan gives administrators special privileges; usually these functions are located in the <u>Administrative</u> section of the <u>Utilities</u> pull-down menu. This includes working with look-up tables, queries, and giving permission for various users of the system to perform specified activities. For a detailed description of these functions, see **Chapter 5: Administrative Functions**.

Help

Allows you to locate help on specific topics, as well as discloses general information concerning your version of SpaceMan that you are running.

Contents

Opens the table of contents in a hierarchical order. Follow paths to the subject you need information about.

Search for help on

Opens the Find setup wizard that will help you localize your search item.

Technical Support Request

If your company has purchased a technical support contract and you have questions or encounter any problems with SpaceMan, you can help PlanData help you by filling out a Technical Support Request form. By using this form, we at PlanData are able to process your request for help in a more efficient manner while providing you with the best solution to your problem. The Technical Support Request form also allows you to provide PlanData with feedback for future product development. Simply fax or e-mail your problems and comments to us, using this form, and we will respond as soon as possible. To make it even easier for us to identify and fix your problem, when the program asks you if you want to send your database, click Yes.

About SpaceMan

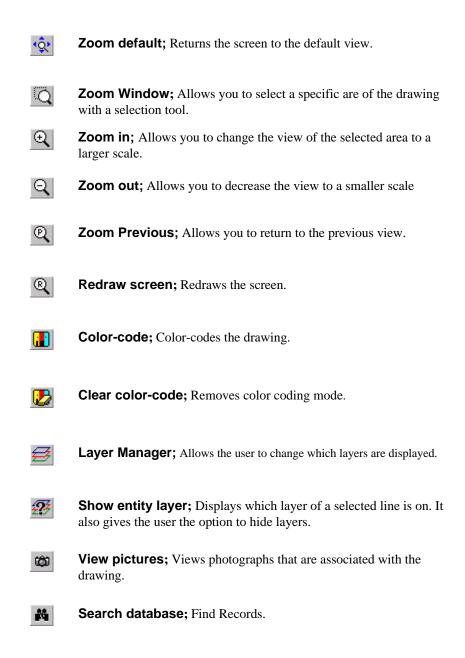
Tells you what version of SpaceMan you own, as well as how much free memory you have left.

Chapter 3 Icon Reference

Icon Descriptions

The main tool bar provides you with a selection of tools (icons) that allow you to work efficiently. Place the cursor on an icon to view its description on the status bar.

2	Open; Opens the select file to open dialogue box where you can view the files in the directory.
	Save; Saves a drawing.
8	Print; the current file, report drawing or graph.
	Print Reports; Choose the Report tab to select the options you want to print. Chose the Selection tab to select the Building, floor and unit. Use the Setup Tab to edit the report header.
° ,	Add boundary; Opens the Accuracy toolbar and allows you to add a boundary to a SpaceMan drawing.
2	Delete boundary; Erase existing or new boundaries.
6	Assign space; Assigns a label to a space. Labels are your "link" to the database.
12	Delete assignment; Deletes an assignment from a space.
Ŀ	Views data files; Gives you access to all the data tables.
Ø	Show area; Shows the area of the space you click on.
	Recalculate areas; Re-Calculates Rentable Square Footage for a floor.



Accuracy Tool Bar

Working with Boundaries

The accuracy toolbar allows you to work with either a SpaceMan file or a CAD file. When you are ready to add a boundary click on <u>Add Boundary</u> from the <u>Boundary</u> pull-down menu, or click on the Boundaries icon. SpaceMan will display the accuracy tool bar. The tools on the Accuracy bar allow you to be precise in the placement of boundaries for space allocation.

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SpaceMan Entities icon; This icon selection is one side of a toggle that allows you to work with drawing entities (boundaries) created directly in SpaceMan.

- **Reference File Entities**; This icon selection is the other side of the toggle that allows you to draw boundaries in geometric relationships to CAD file entities. The reference file typically contains the base or core building, such as exterior walls, columns, mullions, elevators (or other vertical penetrations), lavatories, etc.
- ØShow area; Click this icon to view Square footage allocation of an area.
You can view: Net area, adjusted area, and available rental space.
 - Free hand; Allows you to draw freehand lines.
 - **Snap to line endpoint**; Will position the new line on an existing SpaceMan or CAD entity line.
 - **Snap to midpoint;** Will find center of an existing partition.
 - Snap online; Will end line at existing partition.
 - Snap to intersection; Will position the new line to intersecting lines.
 - **Snap perpendicular to line;** Will position a new line exactly 90 degrees to a selected entity.
 - **Snap to line center point**; Select two parallel lines. SpaceMan will add a centerline between them, and if extra length is specified, will stretch it.
- Snap to center; Will snap to the center of a circle or arch.
- Symbol Origin; Snaps to origin (or intersection point) of a symbol (or AutoCAD block.
- **Dimensional Offset**; Allows you to select a point for a line using exact dimensions in an X, Y plane.
- **Polar Offset**; Allows you to select a point for a line using angular dimensions.
- **Exit Drawing Mode**; Will close the accuracy toolbar and returns you to command mode.

Accuracy Modes

Depending on the mode you select, SpaceMan or CAD, the tools on the Accuracy bar will perform differently. The following table is a review of each tool in its corresponding mode.

Mode	Action with Spaceman entities	Action with CAD entities
Free	Snaps to the selected point.	Snaps to the selected point.
End Point	Searches through all Spaceman boundaries and snaps to the closest boundary end-point.	Searches through all CAD file lines visible on screen in current view and snaps to the closest line end- point.
Mid Point	Searches through all Spaceman boundaries and snaps to the middle point of closest boundary.	Searches through all CAD file lines visible on screen in current view and snaps to the middle point of the closest line.
On line	Searches through all Spaceman boundaries and snaps to the closest point of closest boundary (snap point can be either perpendicular projection from selected point to the closest line, or its end point whichever is closer).	Searches through all CAD file lines visible on screen in current view and snaps to the closest point of the closest line (snap point can be either perpendicular projection from selected point to the closest line, or its end point, whichever is closer).
Intersection	Prompts you to select two boundaries (which will be chosen as closest to the selected points). Calculates intersection point and snaps to it. If boundaries are not parallel and do not cross, intersection point is calculated for their extensions. If boundaries are parallel, no snap is done.	Prompts you to select two lines in the drawing (which will be chosen as lines visible on screen in current view and closest to the selected points). Calculates intersection point and snaps to it. If lines are not parallel and do not cross, intersection point is calculated for their extensions. If lines are parallel, no snap is done.
Perpendicular	Searches through all Spaceman boundaries and snaps to the perpendicular projection from selected point to the closest boundary.	Searches through all CAD file lines visible of screen in current view and snaps to the perpendicular projection from selected point to the closest line.
Center line	Prompts you to select two boundaries (which will be chosen as closest to the selected point boundaries	Prompts you to select two lines (which will be chosen as closest to the selected point lines visible on

	in the drawing). Calculates perpendicular projections from selected points, and snaps to the point exactly between projections. Calculates perpendicular projections from selected points, and snaps to the point exactly between projections.			
Circle center	None	Selects closest circle visible on screen in curren view and snaps to its center.		
Symbol origin	None	Selects closest symbol visible on screen in current view and snaps to its origin (insertion point).		
Dimensional offset	Prompts you for horizontal and vertical distance from last entered point, calculates resulting point and snaps to it.	Prompts you for horizontal and vertical distance from last entered point, calculates resulting point and snaps to it.		
Polar offset	In offsetPrompts you for angle and distance from last entered point, calculates resulting point and snaps to it.Prompts you for an distance from last e point, calculates resulting point and snaps to it.			

Chapter 4 Delineating and Assigning Space

Demising Space

This section will describe the features for sub-dividing space. With some of the more advanced tools found in SpaceMan you can:

- ➤ Delineate Space
- ➢ Work with Layers
- ➢ Re-Demise Space
- > Obtain Area Calculations for Space
- > Specifying Information to be Displayed in Space
- ➢ Add, Edit or Delete Data

Delineating Spaces

A good tip for starting to delineate space is to start from the outside and work your way in. In other words, start by delineating the overall space that you wish to measure out (i.e. glass line, convector line, etc.) to establish gross square feet (SF). Once this has been completed, you can begin sub-dividing space within.

Space is first delineated using SpaceMan drawing tools found on the Accuracy tool bar. Once this is done properly, you can obtain square footage information. In order for SpaceMan to be able to calculate square footage and color-code space, all boundaries that delineate a space must be "closed". In other words, the endpoints of each boundary must touch other boundaries.

In SpaceMan you use these boundaries (or SpaceMan "smart" walls) to enclose an area on the floor plan, such as a suite or common area. Then you assign a room label and other attributes to the area. SpaceMan's approach to defining areas differs from most other systems. The most common approach used by other systems is to add a polygon around each area.

SpaceMan avoids the pitfalls of polygons by using a single line to define a common boundary. These single lines or "smart walls" eliminate the possibility of open space and/or overlap. In addition, SpaceMan uses "interference checking" when adding

boundaries. This ensures that only one boundary will enclose a space, even if you draw completely over another boundary.

This approach to space measurement is more accurate than using polygons, and it also make it easy to subdivide a floor plan. In addition, your SF for the floor will always "box" to your Gross SF.

SpaceMan & CAD Reference Files

One of the key benefits of SpaceMan is its ability to take advantage of the accuracy of CAD files. The way SpaceMan achieves this is by using CAD files as a "reference" for which SpaceMan "Smart Walls" (Boundaries) are drawn. SpaceMan can read the coordinates and lock into them for accuracy.

For example, SpaceMan will recognize the end point of a line even if it had been drawn by a third party CAD system. Depending on how the CAD reference file is developed, SpaceMan can even recognize elements such as insertion points of blocks or symbols. This can be very useful if that block happens to be the center of a window mullion.

In addition to these benefits, SpaceMan allows you to control what information is displayed even if the information is stored on a CAD file layer.

Working with Layers

Every element drawn in a CAD drawing is assigned to a layer. Layers allow you to keep different groups of objects separate within the same drawing. You can think of layering as making a series of acetate overlays. For instance, base building walls, dimensions, electrical and HVAC should all have their own layer within a CAD file (as long as they were produced properly). Producing the drawing in this fashion allows you to hide information not relevant to the current task.

Different boundaries are found on different layers and there are times when you may want to toggle the display of certain boundaries. For example, you may want to turn off all the interior office partitions on the floor for a prospective tenant. The tenant could then plan partitions for division of space. Or perhaps you want to see what a floor would look like without any of the demising walls so that you can quickly get a better idea of the space potential available to a new full floor tenant. Whatever the scenario, you have the ability with SpaceMan to toggle any Reference layer off or on.

Layer Manager:

The five icon buttons at the top of the box allow you to quickly and easily change which layers you are viewing or working with:

- ➢ Display /Hide Layers
- ➢ Make a Layer "Current"
- > Layer Properties
- > Sort Layer List Alphabetically (or numerically)
- ➢ Select all Layer Items

Re-Demising Spaces

Now we will begin re-demising space (as opposed to delineating space from "scratch") since:

Most SpaceMan users have PlanData pre-load properties for them.

There are essentially two ways that a user can re-demise space:

- ➢ Sub-Dividing a Space
- ➤ Combining Space

To Sub-Divide a Space: (adding a boundary)

In this example you will add a boundary partition to create a new space. You will connect column lines to existing partitions in order to sub-divide a space. For this example it is best to use the sample office space drawing [C:\SMW\OFFICE\GH3-03.SM].

1. To begin Select <u>Add Boundary</u> from the <u>Boundary</u> pull-down menu or click on the Add boundary icon.

The Accuracy tool bar appears on your screen and you are ready to subdivide a space.

- Select the Reference CAD File Entities icon from the tool bar. The Reference icon allows you to connect to existing structures.
- 3. Click on the 💽 Symbol Origin (block insertion point) icon.
- 4. Place cross-hair cursor in on a column located on an exterior wall (use the Zoom in tool for a better view of an area), then click the left mouse button.

As you move the cursor away from the column, observe the line that draws along with it. This means that the starting point of a wall has been located.

5. Return to the accuracy tools and click on the 🔐 SpaceMan icon.

You must change modes of the drawing tool in order to attach the line to a corridor wall.

- 6. Select the perpendicular icon from the Accuracy tool bar. Using the perpendicular command assures you the new wall will form a 90-degree angle with the corridor.
- 7. Drag the line to a corridor wall, and then click on the wall.
- 8. Right click to quit drawing a line.
- 9. Move the cursor into the space you sub-divided and right-click.

Notice that the space will color-code blue (set by default) indicating that the space is closed. If it does not color-code, repeat the process of adding boundaries until you successfully close the space.

Note: If you decide not to create a wall after you have already selected a starting point, click the right mouse button. The line dragging behind your cursor will disappear, and the wall will not be created.

To Delete a boundary:

Deleting a wall is a simple procedure. In our example we are going to remove the wall between suites 103 and 105 and name the entire area 103.

1. Select the **Delete Boundary** command from the **Boundary** pull-down menu. Point the cursor (a target symbol) at the wall and click the left mouse button.

2. Click the right mouse button to escape back into command mode.

Combining Spaces

Many times, users need to re-demise space by combining two or more spaces. This couldn't be simpler in SpaceMan since you only need to delete the walls common to both spaces, and then remove the assignment label(s) and create a single label for the new space.

To Combine Space:

- 1. Click on the Delete boundary icon.
- 2. Place the cursor on the partition you want to delete and click. The existing CAD file partitions can not be deleted.
- 3. Right Click in the new space. The Edit Space Assignment dialogue box will open where you will change the room number and other information about the newly created space.
- 4. Click **OK** when you have finished altering the information.

Assigning a Space Label

In order for SpaceMan to be able to tie information to a space, the space must be assigned a Space label. Before we begin this, however, we should discuss how data could affect the process of assigning space. For instance, if the occupancy data for the space is based on the unique combination of Building, Floor and Room (space), then you can enter this data while assigning the space label. Alternatively, you might have a unique combination of Building, Floor and Room so SpaceMan allows you to tie a Lease ID to a space and all relevant information will be tied to this Lease ID. You should note that, in the example of using a Lease ID, you can only view the data - not edit it.

Another important aspect of assigning space labels is to know what types of space that you're going to be assigning. For our purposes, we'll be assigning a label for a tenant space but labels can also be assigned to non-tenant spaces for the purpose of calculating the rentable square footage of a floor and/or building.

To Assign a Space Label:

To assign a Space Label you must first sub-divide a space. Refer to the drawing

[C:\SMW\OFFICE\GH3-01.S_M]. Follow directions found in the section To Subdivide Space (adding a boundary) to continue with Assigning a Space Label. Upon completion of sub-division continue on to assign a Space Label.

1. Click on the 📴 Assign space icon, or select

Assignment > Add Assignment from the main menu. Note that your cursor changes to the hand and pencil icon

2. Click within the space that you want to assign a label to.

The Assign Space dialogue box will appear. Note that the Building Code and Floor Code Fields are already filled in based on the building and floor that you are working with. In the **Old Area** text box you will see the room number of the space you divided.

- 3. Type in a new Space Code. Use the **Old Area** number and add an <u>**a**</u> Ex 306a. If you have a Lease Code to tie to the space, select it by clicking on the drop-down list to display all the valid Lease ID's in your database or just type one in.
- 4. Select a Space Type from the drop-down list.
- 5. Select an Assignment Style from the drop-down list.
- 6. Type a Font size in the Size, in text box provided. Suggested 44pt.
- 7. Click **OK**. The Edit dialogue box will close, returning you to the Assigned space. Your Label will appear in the new room.

You may return to the Edit box by clicking on the room label with the hand icon. All assigned labels can be change using the Assign Space dialogue box. You can move the position of the label by selecting Assignment > Move Assignment command from the main menu.

To Remove a Space Label:

When you need to combine two rooms it is usually because a tenant has moved out and another has taken over their space. This logically involves the removal of a wall, but you must also remember that you must remove the old tenants room record as well. If the record isn't removed, SpaceMan will include the record in its calculations. Therefore, the tenant that vacated the space will still show up in the tenant rent roll, the tenant that took over this vacant space will be under billed, and SpaceMan will issue an error message until the matter is resolved. To remove a room record:

1. From the <u>Assignments</u> pull-down menu select the <u>Delete Assignment</u> command.

Notice your cursor changes into a target symbol.

2. Now place the cursor in the desired room; click the left mouse button. A dialogue box will appear on your screen. Answer the prompts appropriately.

Once you are done, SpaceMan automatically corrects the database and related rent roll reports.

Using Dimensional Offset

This tool allows you to type exact dimensions for placement of boundaries relative to a specified point. That is, once the starting point is defined, the cursor can be moved an exact distance from that point. This feature allows you to draw walls that bend or step in and out.

Note: If you added the walls described in the previous sections, you may want to delete them before beginning this example.

To Draw a Dimensional Offset:

Select <u>Add Boundary</u> from the <u>Boundary</u> pull down menu or click on the boundary icon to open the Accuracy toolbar.

A Dimensional Offset box allows you to move right or left on an imaginary X-axis or up and down on an imaginary Y-axis. The base reference point for a dimensional offset will always be your selected starting point.

- 1. Place the cursor where you want the line to start as a point of reference.
- 2. Click to start the line.
- 3. Return to the Accuracy tool bar and select the <u>1-4"</u> Dimensional Offset icon. The Dimensional Offset dialogue box will appear, prompting you to fill in the X and Y-axis dimensions in inches.
- 4. Type in the X-axis offset, (denote negative integers for left offset) in inches.
- 5. Type in the Y-axis offset, (denote negative integers for downward offset) in inches.
- 6. Click OK for the offsets to take effect.

Using Polar Offset

This tool is similar to the Dimensional offset tool, since it also allows you to specify exact dimensions for placement of boundaries relative to a current starting point. The difference is that Polar offset will allow you to specify angles for your partitions. Rather then **X** and **Y** distances (as we did with dimensional offset), a partition can be drawn any specified distance and angle away from the starting point of the wall.

Note: Zero degree is straight along the **X**-axis moving to the right (positive) of the current point. Ninety-degree is directly above (positive) the current point, along the **Y**-axis. One hundred eighty-degree is straight along the **X**-axis moving to the left (negative). Directly below the current point, along the **Y**-axis, are two hundred-seventy degrees (negative).

To Draw a Polar Offset:

- 1. Place the cursor where you want the line to start as a point of reference.
- 2. Click to start the line.
- 3. Return to the Accuracy tool bar and select the Polar Offset icon 🖄. The Polar Offset dialogue box will appear, prompting you to fill in the Angle degrees and the Distance in inches.

4. Click **OK** for the offsets to take effect.

Viewing Area Calculations

Upon completion of adding demising partitions, you will be able to view the calculations of the new sub-divisions.

To View Space Calculations:

1. First, select the **Assignments** pull-down menu and select the **Show Area** command.

2. Then place the cursor inside the new room and click the left mouse button. A dialogue box will appear on your screen. As an alternative, rightclick while the cursor is situated in the space that you want to calculate the area of. The data menu will appear on your screen, further information (room number, and Net SF) can be found on the status bar, located at the bottom of your screen.

3. Click on **OK** and the data menu will disappear.

Note: If the room is not closed, SpaceMan can not calculate the area. If this occurs, check all boundaries to insure they are closed. The <u>**T**</u>race Boundary command was designed to help you locate these problems.

If you want further details about the floor area and how it is calculated, click on **Utilities** on the main menu and select **View Area Statistics**.

Specifying Information for Display in Spaces

You may decide at some point that you need the room labels to display different information on the drawing. Notice that by default only the room numbers appear on the drawing. However, SpaceMan can display various types of data along with the room number. To change data you want to appear, you must specify the label style of the assignment information.

To Change the label style:

- 1. Select <u>Assignments</u> > <u>Edit Assignment</u> from the main menu. The cursor will change to the edit mode cursor.
- 2. Place the cursor on the desired space and click. The Edit Space Assignment data screen will appear. Notice that sometimes the **Space Code** begins with an asterisk. These assignments are system allocations for tracking common and non-rentable areas, i.e. office buildings shafts, corridors and restrooms.
- 3. Click on the down arrow next to the **Assignment Style box**. A drop down box will appear, listing all of the styles available.
- 4. Select, for example, the **Room/Tenant** style from this box.
- 5. Click on **OK** to apply changes.

Now the room number and the name of the tenant will display in the drawing. In some cases the ability to read this information is distorted by the font size. To change the font size of the label:

Go back into the Edit Space Assignment screen, and click on the Size item box. Enter the new size in inches, and then click on the **OK** button to apply changes.

Editing All Assignments

When you click on **Edit All Assignments** from the <u>Assignment</u> pull-down menu, the Global Edit box will appear. The Global Edit box is used to specify which assignment information will be displayed for all of the spaces. To edit any of the features located on the Global Edit screen, click on the radio button next to the appropriate function.

Click on the radio button next to Include system assignments if you want to include the assignment labels spaces whose ID begin with an asterisk. The asterisk signifies an area considered a common area or non-rentable.

Note: When you change the assignment style, or activate the Include system Assignments feature, you must specify the size that you want this information displayed at.

To hide system assignments, click on the radio button and set the size for 0. All of the labels will disappear. Now go back to the Global Edit screen, and select an assignment style with a size you want the label to display.

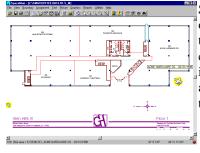
Pop-up Menu

Right-click on assigned space to view pop-up menu. SpaceMan is design to add, edit and modify records. For maximum user effectiveness the screens have been designed to take advantage of look-up tables.

To Modify the Data Tables Associated with a Property:

- 1. Place your cursor in the space you want to work with.
- 2. Right-click in the space. To indicate the space is "closed" it will blue color-code, while a data menu pop-up list appears.
- 3. Select from the list the specific information you want to modify.
- 4. Enter new data in the fields provided.

Working with Lease Option Data



SpaceMan gives you the ability to track which spaces are encumbered by lease options. To see if a space is encumbered by an option, simply move the cursor over the space and, if it is encumbered, a red light will appear in the lower right hand corner of the screen (in the Status Bar). Another way of viewing encumbered spaces is to color code your floor plan on options and any space that has option data associated with it will be colored in. At this point, you can move your cursor over the space and the "bubble help" will display the type of option that space.



If you'd like to see the option data associated with a space, simply right click while your cursor is over that space and the pop-up menu will show "Options - " and the number of options that are associated with that space. If you select "Options" from that pop-up menu, you will see a list of options that area connected to this space. Under "Option Code" you will see the type of option associated with this space (i.e. ROFR = Right of First Refusal or CANCEL for a cancellation option on the space) along with the effective date of the option. You can display the specific data for each option by selecting it on this list. The specific data that would be displayed is to the right of this options list box and includes who the holder is of the option, the type of option (based on the look up table which your SpaceMan administrator has setup (see Administrative Functions), the notice date for the option, the effective date for the option and who is responsible to send the notification. In addition, there is a memo field provided for more descriptive copy of this option.

You may wish to view more details about other spaces that might be affected by this option. This can be accomplished by clicking on the "Details" button at the bottom of this pop-up screen. Displayed will be a list of spaces that are affected by this particular option. For instance, an option can be on every space in a building, any space on a floor, or on a specific space.

Editing Option Data



To edit option data, simply click on the Edit button at the bottom of the pop-up screen and edit the data you wish to change. Included in editing this data might be to change which spaces are effected by a given option.

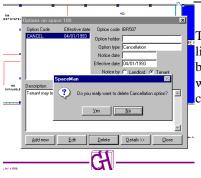


Adding Option Data

To add an option to a space, click on the Add new button at the bottom of the pop-up screen. Select the Option Holder from the pull-down list of tenants by clicking on the down arrow. Likewise, select the type of option that you would like to add by choosing from the appropriate choices provided. Finally, select which spaces are effected by the option. Note that entering a * in any field in the "Affected Spaces" data grid will ensure that this new option will be for all cases in the appropriate columns. For example, entering a * in the Building Column will apply this option to any building in your database, an * in the Floor column will add an option to any

floor in the designated Building column, and an * in the Room column will apply this option to any space on the floor in the designated Floor column.

Deleting Option Data



To delete option data, click on the option that you wish to delete in the Option Code listing. When the option is selected (highlighted), click on the Delete button at the bottom of the pop-up screen. A warning will appear making sure that you really want to delete this option record. Clicking on "Yes" will delete the option while clicking on "No" will return the option pop-up screen.

Assigning an Option to a Tenant

Note: Only users with permission to administrate/modify data can add, delete, or update option information. All other users have permission to read-only information.

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Once option types are setup by the Administrator, you may select a type then assign it to a tenant (lease). Locate the tenant whom you want to assign options (e.g. room 100 on the first floor of Office demo project) and right-click. Select Options from the popup menu. The **Add New Options** form will appear on the screen. If no options are designated, the form will have no data. Click on **Add new** and enter the required information. Make sure you provide the information on what space this option affects. In the example case only the occupied room is effected, therefore only one line in the "Affected spaces" field is written in. Click the **Save** button to store your data:

Once Options are added, you may view their details with use of the options form. Just click on the desired option in the upper left list of options, and the option information will show up. You can click the **Details** button to display the list of rooms affected by this option.



Example 2: The right of first offer (ROFO) option, gives the tenant right of first offer on any available space on the first floor. Enter the * (asterisk) in the Room column field of "Affected spaces", to signify all space on the first floor is affected by this option.

If there were assigned options for all the space in the building, you would enter an asterisk in both the Floor and Room columns. Currently SpaceMan does not allow you to specify an option affecting all rooms in multiple buildings of a project (placing an asterisk in the Building column, is an invalid value).

Making A Record "Current"

A fundamental concept associated with editing or deleting records in a database is that the record must be current to modify it. To tab through the records you can use the **Next**, **Previous**, **First** and **Last** buttons.

REMEMBER: The current record display on screen will be effected by the editing action made.

Adding a Record

Once you have created a space and assigned identification, you should add a record to this space on the database.

To Add a Record:

- 1. Place the cursor on the newly created space.
- 2. Right-click your mouse button.
- 3. Click the left mouse button, on the selection **Spaces**.

A dialogue box will appear which questions you, "Do you want to add a new record?"

- 4. Click the $\underline{\mathbf{Y}}$ es button
- 5. A data table titled Spaces will appear on your screen at this time.
- 6. Type in the new data.
- 7. Click on **OK**, and the data will be saved into the database.

To disregard changes click on **Cancel Changes** and **Close**.

To Edit a Record:

When the appropriate record is "current," you can edit any field by clicking in the space provided. Type the new data to overwrite existing data in the field.

To edit room data:

Place the cursor in a room that you want to change and right-click. The Data table will pop-up.

Select the attribute you want to modify.

SpaceMan will provide you with a data table to enter in the new data. To return to the drawing select the \mathbf{Ok} button.

To cancel, select the <u>Cancel Changes</u> or <u>Close</u> button (depending which is offered on the table).

Chapter 5 Administrative Functions

Modify Rights

This section, will work with the data available to administrators with rights to modify the program.

- ➢ Create a Customized Label
- ➢ Work With Look-Up Tables
- ➤ Add Tables to the Data Menu
- ➤ Create a Query
- Add New Reports to SpaceMan
- ➤ Importing Data
- ➢ Define User Privileges
- Command Line Parameters

Create a Customized Label

SpaceMan allows you to customize and add new label styles for your project.

Select <u>Edit Assignment</u> from the <u>Assignment</u> pull-down menu, and click on a space for the label style you'd like to change. Or, point to the area of the floor plan that you want to edit the assignments of, click the right mouse button, and select **Assignment** from the data menu.

To add a customized label to the list:

- 1. Click on the **Edit Style** button located on the Edit Space Assignment dialogue box. The Space type dialogue box will appear.
- 2. Click on the **New** button.
- **3**. Type in the Style Name.

- 4. Select a Database Field from the drop-down list provided.
- 5. Drag the folder icon to an Assignment line.
- 6. Select a Background type. To fill color, make a selection from the palette.
- 7. Click the **Save** button.

To edit a customized label:

- 1. Click on the **Assignment Style** that you want to change and then click on the **Edit Style** button.
- 2. When the Assignment Style form appears on your screen, click on **Edit**.
- 3. Click on the **Clear** button at the end of the assignment line that you want to change.

To add database information:

- 1. Select a database.
- 2. Select the type of information (field) that you want to display. Highlighting your selection, then drag the table icon to the first blank line under the heading **Assignment Lines**.

To add text:

1. Add comments to your assignment information by typing in your comment, then drag the text comment icon to the first blank assignment line.

Labels may contain up to five lines of information, which are retrieved from the database.

To save your customized label, click on **Save**. Click on **Cancel** to return to the Edit Space Assignment form without saving your changes.

To add a hatch:

- 1. Click on Edit.
- 2. On the right side of the screen is a display of all the background patterns you may select. Click on the radio button next to the hatch style that you prefer.
- 3. Click on Save.

Working with Look-Up Tables

All the data in the system is connected based on common relations to each other. PlanData's SpaceMan is a built around a relational database system. In order to keep structural integrity and to maintain ease of use, certain "codes" are established. Most of these are transparent to you but when they are not, PlanData has created "look-ups" which list all the valid choices.

SpaceMan uses two types of look-up tables, a *Name Value* look-up and *Range* look-up. The Name value look-up is used for alphanumeric data such as space type codes or business type codes. Range tables are used for numeric or date information, such

as rent per square foot or lease expiration dates. Use range to group together information on a graphic and/or report.

Within SpaceMan, look-up tables serve two functions. They are used to validate data entered into the system for exact match look-ups, and they are used to define a model for creating color coded graphics.

Overlapping Range Value Tables

When working with range tables, be careful not to overlap values. In the following example, a value of 80 would match record 1 and 2.

Record #	Lower	Upper	
1	0	100	
2	75	150	

Name Value Tables

The layout of a name value table is as follows:

Field Name	Field Type
Code	Text8
Name	Text32
Sort order	Number
Force_To_Legend	Text1
Fg_color	Number

Range Tables

Range tables work in a similar fashion to Name Value tables. The layout of a range table is as follows:

Field Name	Field Type	
Lower	Number or Date	
Upper	Number or Date	
Name	Text	
Sortorder	Number	
Force_To_Legend	Text	
Fg_color	Number	

To Add a Look-Up Table:

Administrators reserve the right to create look-up tables in order to customize SpaceMan to fit their needs.

- 1. Click on <u>Administration</u> from the <u>Utilities</u> pull-down menu.
- 2. Click on Add Look-Up Table, and an input screen appears.
- 3. Type in the name of the look-up table that you want to create, the type of table it is, and click on <u>A</u>dd. If you decide not to make a look-up table, click on <u>C</u>ancel.

A dialogue box will appear on your screen, asking you if you want to add values to your look-up table.

4. Click on <u>Y</u>es.

Note: Now you are editing the look-up table that you have created. To edit a look-up table, simply click on the cell that you want to change and type in the new information.

To Edit Look-Up Tables:

In order to edit a look-up table:

 Select the following commands in sequence: <u>U</u>tilities -<u>A</u>dministration.Click on <u>E</u>dit Look-Up Table.

Only those tables which are defined as LOOKUP in the table SMANTBLS will be listed. To change values in the table click in the cell and type in the value. Data will be updated as soon as the cursor leaves the cell.

To add a new record:

Go to the last empty row and start typing data in there. To delete a record, or selection of records, click on the record selector (in the leftmost column). Now select/deselect records, then hit the Delete key on the keyboard.

To sort data by one of the fields in the table:

Click on the column header of the column you want to sort by. For example, you may want to select records by the SortOrder field to see the sequence of colors in the legend when you color code drawing.

To change colors assigned to each record:

Type in the number of the color directly into the data grid (valid color number range from 0 to 255). As soon as the cursor leaves the cell, with the new color number, a corresponding tab on the right side will respectively change its color. Another, more visual way to do this, is to double-click the color tab and then select color from the available list.

1. Click on the color box at the right of the field that you want to edit .

For this example, click on the color to the right of the row labeled Available. This will bring up the Color Fill Editor.

2. Click on the color that you want to change the color to, and then click on **Save**. To exit without changing the color, click on **Cancel**.

Add Tables to the Data Menu

When you select a space by clicking the right mouse button, SpaceMan creates the data menu. The data tables available come from the SMANTBLS table, located in the SpaceMan Access database.

To add a table to this list:

- 1. Click on Edit Data Files from the Utilities pull-down menu.
- 2. Select SMANTBLS from the list box that appears.
- 3. Scroll to the bottom of the list and add a new record with the TblName, TblType and BFRkeylen.

TblName is the name of the table that you previously added to SpaceMan.MDB. TblType describes the type of table. Valid choices are: IMPORT, BLDG, FLR, UNIT, LOOKUP, REPORT, SYSTEM and MASTER. BRFkeylen describes the number of fields in the primary index. For SpaceMan to link data to a space on the screen, the BFRkeylen key must be at least 3. This tells SpaceMan that the file is indexed on "Building, Floor and Room".

Working with Queries

Microsoft Access queries are used to define how the drawings are to be color-coded and what appears in the legend. There are two types of queries. The first type will return information on a room by room basis, which is used for floor plans and stacking diagrams. The second type, which is used for Pie Charts totals the area for each category in the lookup table.

To create a new Query

- 1. Click on the **Add <u>Q</u>uery** button, located on the Administration form. The Add New Query screen will appear.
- 2. Enter the query name, and select a query type.
- 3. Enter a description of the query in SQL (Structured Query Language) terms.

You can do this manually by typing the SQL definition on the screen, or by loading it from a disk file using the load button. Note: To produce a Query for color coding drawings each field must be prefaced by "cc".

4. Select the <u>Check</u> button, and the query will be verified.

If no errors are found, the query will be executed, and qualifying records will be displayed on the screen. If query definition fails, an error message will display.

5. Select **Save** to add the query to the database, or **Cancel** to close the form and exit.

Adding New Reports to SpaceMan Working with Queries

PlanData offers custom report writing as one of its many services. However, if you choose to write your own reports you can use any report writer that works with Microsoft Access. PlanData uses Crystal Reports distributed by Seagate Software. However, the software is not included with SpaceMan. SpaceMan uses a run-time version only. If you are interested in purchasing a full version of Crystal, contact the address below to see where your closest retailer is located.

To Purchase Seagate Report Writer software:

Seagate So	oftware				
1095 West Pender Street					
4 th Floor					
Vancouver	; BC Canada V6E 2MG				
Tel:	(604)681-3435				
Fax:	(604)681-2934				
Website:	http://www.img.seagatesoftware.com				

Linking the New Report to SpaceMan

1. Once you have created a report with Crystal Reports, you need to copy it into your **Report** directory (specified in Setup/Directories/Reports).

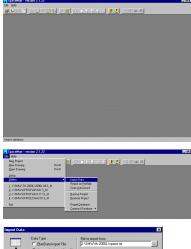
- 2. Then start up SpaceMan and open a drawing in the project that you want to work on.
- 3. Select <u>Utilities Edit Data Files Reports</u>.

The Access table that is presented is used to communicate between SpaceMan and Crystal Reports.

- 4. Go to the bottom of the table and add a new record with a description of the report in the first column, entitled "Report Name".
- 5. Type the report's file name in the second column, entitled "Report File".

The rest of the fields can be edited interactively from SpaceMan during run-time.

Importing Data into SpaceMan



Bolia Type
 B

Before you begin this section it is important to note that you can not import data when a project is open.

To Import

Start SpaceMan < click on **Cancel** in the **Select File to Open** dialogue box You should be left with a blank SpaceMan screen From the menu bar select **File** < **Utilities** < **Import Data**

In order for SpaceMan to display the most accurate and timely information, SpaceMan allows you to import data from other sources (i.e. from your property management accounting systems, etc.). For maximum flexibility, SpaceMan has many different methods for importing data, which varies based on the source and type of data that you plan on importing. Following is a quick list of the different methods for importing data, after that are some examples of each along with more detailed descriptions for producing each.

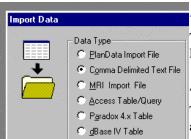
Import Data Types

PlanData Import File (.PDI)

This is a file format designed to directly map fields import file fields to corresponding SpaceMan fields.

Comma Delimited Text File (*.txt)

This is one of the most standard methods of transferring data between different applications. The file consists of one line per record with a comma separating field values.



MRI Import File

This is a file that is generated from a property management accounting system called MRI (Management Reports Inc.)

Access Table/Query

This method is for importing a Microsoft Access table into SpaceMan. This can be an existing table or the "Answer Table" to a Microsoft Access query.

Paradox 4.x Table

Tables in InPrise's Paradox database format.

dBase IV Table

Tables in InPrise's dBase format.

Import Data Options

For any of the different methods described above, there are options that the use can apply at time of import. These options allow you to decide, based on the source of your data, whether or not you want to append records to an existing SpaceMan database, overwrite them, update them, etc. These options are as follows:

Add <u>new records</u>, update existing records
 Add <u>new records</u> only
 Update existing records only

Delete all existing records only Delete all existing records, then add new record

Add new records, update existing records

By choosing this option, the user will be updating existing records with information contained in the import. If a particular record does not exist in the SpaceMan database, it will be added during import.

Add new records only

This option will ignore any information in the import file if a corresponding record exists in the SpaceMan database but will add records where there are no corresponding records in the SpaceMan database.

Update existing records only

The import program will only update SpaceMan records where there are corresponding records in the import file. It will ignore import file records that do not have corresponding records in the SpaceMan database.

Delete all existing records, then add new records

Obviously, this is the most dramatic option that can be selected. This option will wipe out all SpaceMan database records for the selected location in the SpaceMan database (see next section) and replace it with the records contained in the import file. This option is used mainly when you are performing periodic updates to your SpaceMan database (i.e. when accounting "books" data and it is ready for import into SpaceMan.

Selecting the Source, Destination & Import Model

When importing data, you obviously need to specify the file that you are going to import, and the corresponding SpaceMan file that you want to populate based on this import file. You can also specify a "model" from which SpaceMan will import. More descriptions are as follows:

		×	
	File to import from		
	J:\SMW\th-2000L\space.txt		
le			
		100	S
100	Database to import to	1	
	J:\SMW\th-2000L\spaceman.mdb		C
	Table to import to	. (66) (10)	I
	Leases	• 1000	

File to import from

Select the file that contains the data to be imported into SpaceMan. You can use the "browsing" tool (...) provided to search your network drives for the location of this file.

Database to import to

Select the SpaceMan database location that to which you want to import data to. As in above, you can use the "browsing" tool (...) to choose the SpaceMan database.

Import Table / Model

Choose a table or a model from a list of valid choices, which will be used as a basis for this import. When performing an import, you should know the type of data that is contained (i.e. whether the information is lease-related data, option-related data or store performance data, etc.) before you perform the import.

Advanced Import Functions

					×
	Data Type		File to import from		
- 40	at to the interval	ttinan	European and appendix		
					1 100000
- F	Field	Destination table L Default value		<u>DK</u>	-
-	M BCODE	Decard value			
-	SM FEDDE			Dear Defaults	-
-	SM RCODE		<u> </u>		-
	Tesari		E I	Suppress <u>All</u>	-
-	Contact		E	Suppress None	
	Phone		E	Topper Line	E
	SIC		C	Help	
	1				
	C Delete all	existing records. the	n add new records		
				Hek	
					1000000

Once you have selected a type, option, source, destination and table/model, you may or may not see the "Advanced" button become undithered (depending on the combination that you choose, "Advanced" may or may not be a valid choice). For each field in the source (SpaceMan) table, the user choose to have certain data modified on import based on the following:

Default value

In the event that a particular field is blank (or null) a value entered into this column will replace the corresponding null value.

Suppress Leading '0'

Selecting this option will strip out any 0's that precede a given value. This is used most frequently when the import data contains "leading 0's" for floor or room numbers where the corresponding SpaceMan records do not contain similar "leading 0's".

Import

When all the selections are made for your import, simply click on the "Import" button to execute the actual import of data. Depending on the quality of your import file and/or the quality of data in the import file, you may or may not encounter some error messages and/or warnings during the import procedure. Be sure to read the message carefully and select the option that you feel best reflects your requirements for this import keeping in mind that you will have the option at the end of this process to save or not save your import. Keep in mind that there are some conditions

that may cause your import to fail immediately. Please refer to the following section of the documentation for some guidelines on creating your import file.

Creating SpaceMan Import Files

The following section is a guideline that you can use in producing a file for later import into SpaceMan. To get started, first, you must determine which of two methods for tying data to your floor plans:

Method: By a unique combination of Building / Floor / Room

This is the option that is the easiest to implement and maintain but can only be used if you are confident that your external source of data has valid room numbers entered into it and that they are maintained consistently.

This is a good alternative in case you are not maintaining accurate room numbers in your external database.

After you determine which method to use, there are several ways of bringing external data into Spaceman database, which are based on the following:

Using regular ASCII text files with comma-separated values (CSV).

The advantage of this method is that CSV files can be easily generated by many standard software packages, i.e. MS Excel, Lotus 123, etc. Using this method a user creates a separate file for each table in the SpaceMan database which he/she wants to update. The update routine in Spaceman must be executed for each table you wish to populate.

Structure of comma-separated value (CSV) import files:

1st line:

Field names separated by commas.

To import data without integrity violations, EITHER first three fields in the import file must be SM_BCODE, SM_FCODE, SM_RCODE (building, floor, room codes) in this order when importing to Building/Floor/Room indexed table, OR first two fields must be LeaseCode and BuildingCode when importing to LeaseCode indexed table.

2nd and following lines:

Records with comma delimited data. The following rules apply:

- fields must be separated with commas
- text must be enclosed in double quotes (e.g. "123 MAIN STREET")

- Dates must be entered in the MM/DD/YYYY format, e.g. 06/21/1997, or in MM/DD/YY format, e.g. 06/21/97. Four digits in the year portion are preferred because of the Year 2000 issues, for they do not create ambiguities. If year is presented with 2 digits, SpaceMan will use a user-defined "century window" for interpreting these dates.

The combination of building, floor, room codes or LeaseCode should uniquely identify each record (e.g. no two records in the import file may have building code "ABC", floor code "01", room code "100"). Maximum length of building code is 6 characters, floor code is 3 characters, room code is 8 characters, and LeaseCode is 12 characters. Please refer to the file specifications at the end of this document. Following is a partial example of data file, which will be properly read by SpaceMan (building/floor/room based):

SM_BCODE, SM_FCODE, SM_RCODE, LeaseArea, Tenant, Contact, Phone, StartDate, EndDate, Rent, Rent_SF
"005001","1","00100", 343.00, "ORIGINAL C","", "",05/01/1989,12/31/2009,"", "", "", "", "",""
"005001","1","00101", 7095.00, "LANE BRYAN","", "",06/13/1989,12/31/1999,"", "", "", "", "","
"005001","1","00102", 1959.00, "SPENCER GI","", "",10/22/1989,01/31/1998,"", "", "", "", "","
"005001","1","00103", 1424.00, "KAY JEWELE","", "",07/24/1989,12/31/1997,"", "", "", "", "","
"005001","1","00104", 1959.00, "NORTHERN STAR","", "",07/01/1989,01/31/2004,"", "", "", "",""

Or, for Lease ID based data, the file will look like

LeaseCode,	BuildingCode, Tenant, Contact, Phone, StartDate, EndDate, Rent, Rent_SF, TOT_RENT, TOT_REN
"LG-123",	"005001", "ORIGINAL C","", "",05/01/1989,12/31/2009,"", "", "", "", "",""
"MN-678",	"005001", "LANE BRYAN","", "",06/13/1989,12/31/1999,"", "", "", "", "",""
"ED-543",	"005001", "SPENCER GI","", "",10/22/1989,01/31/1998,"", "", "", "", "",""
"WE-501",	"005001", "KAY JEWELE","", "",07/24/1989,12/31/1997,"", "", "", "", "",""
"WE-091",	"005001", "NORTHERN STAR","", "",07/01/1989,01/31/2004,"", "", "", "", "","

Building/floor/room based file with data on Stores:

SM_BCODE , SM_FCODE , SM_RCODE , BUSST , SALES , SALES_SF , SALES_PC_CHANGE , BREAKPOINT , BREAKPOINT_SF						
"005001", "1", "F-1", "SPE", 821774.69,	365.00, -2.4,	788003.13,	350.00			
"005001", "1", "G-10", "FSV", 750561.67,	310.00, -12.4,	847408.33,	350.00			
"005001", "1", "G-11", "WMC", 1399171.67,	420.00, -2.4,	1332544.44,	380.00			
"005001", "1", "G-12", "WMC", 543537.78,	320.00, -20.3,	594494.44,	350.00			
"005001", "1", "G-13", "VAC", 0.00,	0.00, 0,	0.00,	0.00			

Or, for Lease ID based database, the same data will look like this:

LeaseCode,	LeaseCode,BuildingCode,FRONTAGE,BUSST,SALES,SALES_SF,SALES_PC_CHANGE,BREAKPOINT,BREAKPOINT_SF								
"LG-123",	"005001",	34,	"SPE",	821774.69,	365.00, -2.4,	788003.13,	350.00		
"MN-678",	"005001",	24,	"FSV",	750561.67,	310.00, -12.4,	847408.33,	350.00		
"ED-543",	"005001",	43,	"WMC",	1399171.67,	420.00, -2.4,	1332544.44,	380.00		
"WE-501",	"005001",	21,	"WMC",	543537.78,	320.00, -20.3,	594494.44,	350.00		
"WE-091",	"005001",	20,	"VAC",	0.00,	0.00, 0,	0.00,	0.00		

Using PlanData Import (PDI) files:

The most flexible way to import data into SpaceMan is to use PDI files. The data from a single PDI file (which is still a plain ASCII text file, but fixed length) can be imported into one or more SpaceMan tables in one pass. The structure of PDI file is the following:

Any number of lines at the beginning -

Comments (see example)

Following lines -

Fixed length records (see example)

Example of PDI file (notice that fields have fixed length):

All Operating Properties								
As of 05/	As of 05/31/97							
111107	,	1,	1187, DANSKIN/ROUND THE CLOCK	,	10/05/1993,	6/30/1998,	14244.00,	12.00
111108	,	1,	1206,VITAMIN WORLD	,	6/23/1996,	6/30/1998,	17487.00,	14.50
111109	,	1,	3708, CORBIN FACTORY STORES	,	6/18/1990,	9/30/1998,	61182.00,	16.50
111111	,	1,	7500, BASS COMPANY STORE	,	6/07/1993,	6/30/1998,	97500.00,	13.00
111114	,	1,	3072, GEOFFREY BEENE	,	6/07/1993,	8/31/1998,	36864.00,	12.00
111207	,	1,	2045, KASPER	,	1/01/1994,	11/30/1999,	32720.04,	16.00

In this example first 2 lines are comments to the data to help user to identify data by looking at it. SpaceMan will ignore comments during import.

To setup SpaceMan to properly read PDI file user has to enter necessary mapping information in PDI_MODEL and PDI_DETALS tables in destination SPACEMAN.MDB. As soon as user chooses to import PDI file and select the destination SPACEMAN.MDB, he is presented a list of import models from PDIMODEL table. PDI_MODEL describes the import model and number of header lines before actual data:

ModeIID	ModelName	NumberOfHeaderLines
1	Import from MRI system	2
2	Import from SkyLine system	2
3	Excel data import	2

Table PDI_DETAILS describes selected model and data mapping to fields in tables:

ModeIID	TableName	FieldNo	FieldName	StartPos	Length	Calculation
1	Leases	1	LeaseCode	1	12	
1	Leases	2	BuildingCode	13	4	
1	Leases	3	Tenant	24	30	
1	Leases	8	StartDate	55	10	
1	Leases	10	EndDate	67	10	
1	Leases	11	RENT	79	11	
1	Leases	12	RENT_SF	91	7	
1	StoreData	1	LeaseCode	1	12	
1	StoreData	2	BuildingCode	13	4	
1	StoreData	3	BUSST	163	3	
1	StoreData	4	SALES	167	10	
1	StoreData	5	SALES_SF	202	8	
1	StoreData	8	SALES_PC_CHANGE	211	8	
1	StoreData	9	BREAKPOINT	141	11	
1	StoreData	10	BREAKPOINT_SF	153	8	

Default Structure of table LEASES

Table: Leases (Building/Floor/Room Method)

Field Name	Туре	Size			
SM_BCODE	Text	6			
SM_FCODE	Text	3			
SM_RCODE	Text	8			
Tenant	Text	32			
Contact	Text	32			
Phone	Text	32			
SIC	Text	6			
LeaseArea	Double				

StartDate	Date		
EndDate	Date		
RENT	Currency		
RENT_SF	Currency		
TOT_RENT	Currency		
TOT_RENT_SF	Currency		
Note	Text	8	

Table: StoreData: (Building/Floor/Room Method) Field Name

Field Name	Туре	Size
SM_BCODE	Text	6
SM_FCODE	Text	3
SM_RCODE	Text	8
BUSST	Text	8
SALES	Currency	
Phone	Text	32
SIC	Text	6
SALES_SF	Currency	
PROJ_SALES	Currency	
PROJ_SALES_SF	Currency	
SALES_PC_CHANGE	Double	
BREAKPOINT	Currency	
BREAKPOINT_SF	Currency	
SALES_TO_BREAKPOINT	Double	
OCCUPANCY_COST	Double	
Note	Text	80

Table: Leases (LeaseID Method)

Field Name	Туре	Size
LeaseCode	Text	12
BuildingCode	Text	6
Tenant	Text	32
Contact	Text	32
Phone	Text	32
SIC	Text	6
LeaseArea	Double	
StartDate	Date	
EndDate	Date	
RENT	Currency	
RENT_SF	Currency	
TOT_RENT	Currency	
TOT_RENT_SF	Currency	
Note	Text	80

Table: StoreData: (LeaseID Method)

Field Name	Туре	Size
LeaseCode	Text	12
BuildingCode	Text	6
BUSST	Text	8
SALES	Currency	
Phone	Text	32
SIC	Text	6
SALES_SF	Currency	
PROJ_SALES	Currency	
PROJ_SALES_SF	Currency	
SALES_PC_CHANGE	Double	
BREAKPOINT	Currency	
BREAKPOINT_SF	Currency	
SALES_TO_BREAKPOINT	Double	
OCCUPANCY_COST	Double	
Note	Text	80

Table: BUSTYPE: (LeaseID Method)

This table is used as a lookup to the BUSST field in the StoreData table and defined the Merchandising Categories. It is highly recommended that this table be populated with general categories so that the graphic is too many details to make it effective.

Field Name	Туре	Size
Code	Text	8
Name	Text	32

Defining User Privileges/Administrative Rights

Click on the <u>Administrative</u> selection on the <u>Utilities</u> pull-down menu. The Administrative form will appear; select <u>Users</u> from the options available. Within this dialogue box you can add or delete users from the system and assign privileges they can receive. When you are complete select <u>Close</u> to return to the Administration form. The changes made here are automatically saved.

SpaceMan Editions

SpaceMan editions are set by a serial number, which determines the functionality of the program.

SpaceMan; has all groups of users, including Administrative Rights that allows the program to be modified.

SpaceMan/Broker; is a view only edition for a Broker, without Administrator rights.

Demo has "Broker" rights, but can not save anything; limited to Office, Retail and Proto projects.

Group	Administrate	Modify Data	Create Scenarios	View Data
Administrator	Y	Y	Y	Y
Modifier	Ν	Y	Υ	Y
Broker	Ν	Ν	Υ	Y
Viewer	Ν	Ν	Ν	Y

User Groups and their Recommended Access Rights

Access Rights Description

View

Can "View", zoom in and out, color code, prints floor plans; view data in database; run and print reports. Can not change data; can not change space assignment; can not save any changes.

Create Scenarios

All "View" rights; can create scenarios from master database. In those scenarios, you can draw and assign spaces. You can not change data in master database or save scenarios back to master database.

Modify Data

All rights except rights of an Administrator.

Administrate

Can assign rights to users, create database tables and queries, and change data in all tables.

Command Line Parameters

It is possible to pass certain parameters to SpaceMan from the command line. The name of a data file to load can be supplied, as well as user's ID and password. This feature helps you to get to data faster by passing the login and file selection processes, and it also makes it easier to link SpaceMan to third-party software products.

SpaceMan can be called with the following parameters in command line:

C:\SMW\SMANW32.EXE [/fnFILENAME] [/uUSERID /pPASSWORD]

Open SpaceMan files from the command line.

Enter /fn along with the path of a Spaceman file and the filename will start spaceman and automatically open the specified file. Enter the full file name and path of a SpaceMan data file. If it is specified in the command line, the program will try to load it automatically when it starts. If the file could not be found, the program will prompt you to select another location

User ID & Password

If specified, the program will bypass the login screen and perform checking on supplied ID and password. If they are invalid, you will be prompted to enter ID and password again.

To run SpaceMan with regular login and file selection:

C:\smw\smanw32.exe

To automatically load a file and go through regular login process: C:\smw\smanw32.exe /fnC:\SMW\OFFICE\GH3-01.S M

To login as "AFB" with password "QWERTY" and select file from the prompt: C:\smw\smanw32.exe /uAFB /pQWERTY

<u>To automatically load a file and login as user "AFB" with password "QWERTY":</u> <u>C:\smw\smanw32.exe /fnC:\SMW\OFFICE\GH3-01.S_M /uAFB /pQWERTY</u>

To work in the citrix environment you must have /citrix in the command line. Instead of using the application path \temp folder for temporary files. The /citrix command line parameter will store temporary files in the application path\temp XXXXX, where XXXX is the user ID.

C:\smw\smanw32.exe /citrix

To modify the location of the temporary folder SpaceMan uses with citrix during it's normal operation the user can add a drive letter and path after the /citrix, for example /citrixZ:\TEMPFILES.

To override the stored directory for the location of SpaceMan projects: C:\smw\smanw32.exe /oZ:\NWREGION\SMW

NOTE: beware of leaving 2 spaces between parameters. It may cause

Chapter 6 Calculating Rental Space Availability

Introduction to Calculating Rental Space Availability

This chapter covers:

Defining Area Calculations

Selecting a Methodology for Calculating Rentable Areas

Where to Start Calculation Rentable Area

Calculating the Rentable Area by Type of Space

Alternative Methods of Calculating the Rentable Area

When computing the rentable area of a tenant's space, it is important to differentiate between usable and rentable space. The most prevalent definitions for these terms are:

Term	Definition
Usable Area	The demised area a tenant occupies.
Rentable Area	The actual area a tenant will be charged for in a lease.

The rationale behind Rentable Area is that while the tenant may only be occupying a certain section of a floor, they are using and/or benefiting from other amenities that are located on that floor or in that building (such as bathrooms, elevator lobbies, mechanical spaces, etc.). The tenants should share the square footage of these amenities. Therefore, the rentable area is the tenant usable space plus a proportionate share of the floor and common building spaces. SpaceMan doesn't take a position on how areas are calculated. Instead, SpaceMan provides the tools to easily allocate these common spaces and generate rentable areas in a consistent manner.

A Word About Accuracy

Before we begin the mechanics of how SpaceMan calculates rentable area, please review the **warning** regarding accuracy.

In SpaceMan, the drawings can be considered to be scaled area models of buildings. The CAD file (or reference file as it is called in SpaceMan) is the computer model that SpaceMan uses as its source for architectural information. Since SpaceMan allows you to lock into the geometry of the underlying CAD file (and, in essence, traces over the drawing) it is the accuracy of this underlying CAD file that controls the accuracy of the area calculations. **Do not presume a CAD file is accurate** without checking on how it was created. We recommend that you find out who created the file and verify the accuracy of the file. For this reason, PlanData's SpaceMan software can in no way be held responsible for errors resulting from inaccuracies in the underlying CAD file.

Add Factor vs. Loss Factor

The add (or load) factor is the percentage added to a tenant's usable area to calculate the rentable area. A loss factor is the percentage of a tenant's rentable area, which is lost.

Methods of Calculating the Rentable Area

There is more then one methodology to use in calculating the Rentable Area of a building. There are many variables to consider when developing any methodology for example, sometimes the variable is the local market that is the deciding factor. Many organizations use *The Building Owners and Managers Association's Standard*, for office buildings as a basis for rentable areas and make adjustments accordingly. Whatever your methods, SpaceMan provides the tools to quickly re-allocate the building and present the numbers in an analytical manner.

The decision on how to market space is usually a team effort, consisting of the broker, Management Company, asset manager and the owner. Some of the key market factors have to do with return on investment, quality of the product, the strength of the local market and the broker's style of leasing space.

Whatever the desired result, SpaceMan provides the tools for implementing a consistent, mathematically correct set of rentable areas. There are many advantages to providing accurate and consistent area calculations. One such advantage is due to the increasing level of tenant contingency audits where spaces are measured and claims are made pertaining to items ranging from base rent to the percent of building occupancy. **A potential for serious financial and legal discord is tremendous**. For this reason, a well documented, extremely accurate and consistent set of area calculations is your best defense (especially when those questioning it are on a contingency-fee basis).

If you plan to follow a published standard we recommend that you review the entire document and use SpaceMan to understand the ramifications **before** you implement area calculations for a property. If no standard exists, you should analyze the existing leases for the property as a basis for determining area calculation standard and make adjustments accordingly.

Where to Start Calculating Rentable Areas

For users who have never before attempted to calculate the rentable area of a building, many ask, "Where do I start." In setting up a standard for calculating the rentable area, you should break the process down into two steps.

- > How is each space measured (demised area)?
- > How do I get from demised area to rentable area (factoring)?

In the first step, you must decide how each space in the building is going to be measured. The only difficult part is to decide how to handle partitions that separate adjacent spaces. For example, when an elevator shaft abuts a toilet room, which room's area includes the shared partition? Most published guidelines provide a detailed description on how to measure each space. Regardless of the methodology you follow, it is generally good practice to start from the outside and work in. First define the measuring points on the exterior wall to achieve the gross area.

A typical scenario is as follows:

- Non-rentable core space, such as elevator shafts take the area of their enclosing walls before:
- Building common core space takes the area of their enclosing walls before:
- Floor common core space takes the area of their enclosing walls before:
- Retail, office or storage spaces.
- On multi "tenanted" floors, the area of corridors usually include the area of the walls that separates tenant space.

Factoring.

Calculating the Rentable Area by Type of Space

While a tenant might only be occupying a certain section of a floor, they are using and/or benefiting from other amenities that are located on that floor or in that building. The tenants usually share the square footage of these amenities. This section describes how SpaceMan calculates the proportionate share of common spaces. The logic behind this method of calculating the rentable area is very straightforward. Keep in mind that:

- 1. Each space is assigned a **Space Type**.
- 2. Each Space Type is assigned to Apportionment Category.
- 3. The rentable area of tenant space is the usable area plus the proportionate share of all common apportioned categories.

Before using SpaceMan to calculate rentable area, you must first make sure that all spaces in the building have been assigned

Assigning Space Types to Categories

When you assign a space, SpaceMan calculates and stores the actual area. Also when you are assigning the space, you specify a space type such as main lobby, office, stair, etc. Each of the space types is then assigned to an allocation category such as building common, floor common, etc. Using this method you can quickly re-classify a space from one category to another and recalculate the area of the building as it relates to the RSF for each tenant. To re-classify a space type from one category to another:

- 1. Position the cursor on a space and right-click. Select **Assignment** from the data menu. When the Edit Space Assignment menu appears, click on the **Edit Type** button.
- 2. Position the **Space Type** to be edited by using the directional buttons.
- 3. Click the **Edit** button.
- 4. From the Space Category drop-down menu, select a new type.

Floor Area Statistics

When you click on **View Area** <u>Statistics</u> from the <u>Utilities</u> pull-down menu, the Floor Area Statistics form appears. On the right side of this form there is a listing of all of the different area types.

The Floor Area Statistics screen shows the actual area of each allocation category on the floor, as well as the current method of allocation, factors and rentable area. From this screen you cannot change total usable area because that information is based on how you assign each space. To show how each space on the floor is categorized, select **Show Assigned** from the **Assignments** menu. Note that this is the same graphic that is produced when you color-code a floor plan on Area Types.

Alternative methods of Calculating the Rentable Area

In addition to calculating the rentable area of a building by type of space, SpaceMan also allows you to calculate the rentable area by:

- > Specifying the rentable area for a floor.
- > Applying a fixed factor on top of the calculated floor common factor.
- > Applying the total factor to a floor.

Each of these methods are selected by clicking the check boxes next to the appropriate item in the upper left hand side of the Floor Area Statistics screen. To open this screen select **View Area Statistics** from the **Utility** menu.

Specifying Rentable Area for a Floor

This method allows you to specify the total rentable area for the floor. When using this method, there is no need to assign common spaces on the floor, because they are not entered into the equation when the factor is calculated.

Applying a Fixed off Floor Factor

In this method SpaceMan calculates the rentable area by applying a user-specified factor to all office and floor common space. Using this method, you must assign the office space as well as all floor common spaces on the floor.

Chapter 7 Create a New Project or Drawing

Creating a New Project



To create a new project, make sure that there is no other project open. If there is a floor plan on your screen, that means that there is a project open and you must close it.

If you have just started SpaceMan click <u>Cancel</u> on the Select file to open Dialog box.

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Select <u>File</u> at the upper left-hand corner of the screen. On the pull-down menu select **New Project**. Under **New Project Location** select the drive where you want to store this project in.

When you enter a **Project Name**, you are creating a new directory. (i.e. C:\smw\smsample)

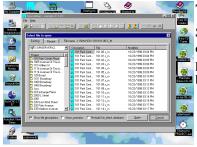
The **Project Description** is the information that will be displayed in the left column when opening up a drawing.

You will be prompted to select a **Project Template** for the new project. A template is an existing project on your computer. Select a project folder to be used as a template, which matches the type of project you want to create (i.e. Office, Retail, and CAFM).

SpaceMan will copy the necessary data files for the new project.

Create a New Drawing

Before you attempt to create a new drawing in SpaceMan, make sure you have a CAD file to use as a background or reference file.



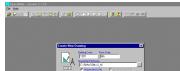
To Create a New Drawing if you have not Logged into SpaceMan

Start SpaceMan; click on <u>Cancel</u> at the lower right-hand corner of the <u>Select file to</u> open Dialog Box. Select <u>File</u> at the upper left-hand corner of your screen. On the pull-down menu select <u>New Drawing</u>. Next fill the <u>Create New Drawing</u> dialog box (see details in this section).

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To Create a New Drawing <u>if you have just created a New Project or have</u> <u>another drawing file open</u>

Go directly to **<u>File</u>** at the upper left-hand corner of your screen, from the pull-down menu select **<u>New Drawing</u>**. Next fill the **Create New Drawing** dialog box (see details in this section).



Create New Drawing dialog box

Type the **Building Code** that you are assigning. Type the **Floor Code** (i.e. 6th). Click under **SpaceMan File Name**, select or type a path (project folder location) plus the SpaceMan file name you are assigning. (i.e. C:\smw\smsample\230M-01)

Select Master file(S_M)

Enter the SpaceMan file name using the naming convention of **BBBBB-FF**, where BBBBB is the building code and FF is the floor number.

Under **Background CAD File Name**, click on the background file name field; select a path for the background and Highlight the CAD file name that you want to use in your drawing.

When you click **Ok**, SpaceMan will create the new file and display the reference file.

To continue See Chapter on **Delineating and Assigning a Space, Icon Descriptions and Accuracy Toolbar.**

Enable Rentable Area Calculations

If you want to activate SpaceMan's area calculation features, click on the **Enable Rentable Area Calculations** box. Enter the Rentable Area for the floor if appropriate.

Adding and Editing Assignment Information

In order to attach data to a space, you must first assign the space to the database. Aside from just providing information, data links SpaceMan to the database.

When you create a new space, remember to assign information to that space by click on **<u>Add</u> Assignment** and then the newly created space.

The Assign Space data screen will appear. When you enter the information that you want assigned to this space, it will automatically be saved in Access.

Edit Assignment

Allows you to change assignment information residing on the database. When you click on this command, the Edit Space Assignment form appears. Simply edit the information that you want to change, and Access will update the changes when you save the floor plan.

You can alter the assignment information displayed on the floor plan relatively easy, by changing the style. Click on the **Edit Style** button. For example, some people may wish to look at a floor plan with the Space numbers and RSF while others may wish to see the tenant name. Furthermore, users can customize styles with data from user-specific tables.

Editing All Assignments

When you click on **Edit All Assignments** from the <u>Assignment</u> pull-down menu, the Global Edit box will appear. From this screen you can:

Change the rotation and size of the assignment information.

Select the space type and assignment style.

Only select **Include system assignments** if you want all Space Labels changes (i.e. core spaces, etc.).

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