



Reloading a Floor Plan Image in MapSense

Applies to:	SynapSense MapSense Floor Plan
Objective:	This document details the steps required to change or update the floor plan background image in MapSense. Following these steps, the customer will be able to perform the necessary modifications required to update their layout effectively and trouble-free.
Pre-Requisites	If your monitor's maximum resolution is 1024x768, then you will want your floor plan image to be as close to that size as possible (giving the best quality/layout in the Web Console).

Description

Floor plans in data centers change over time. New cabinets are installed, additional walls are built, CRAC's are added, and the existing floor plan image in MapSense may not accurately represent the layout of your data center. You request a new floor plan image from the architect and they send you a file with the latest graphic.

There are a few considerations when planning on reloading the floor plan image in MapSense:

- Is the new image size(resolution) the same as my existing image in MapSense?
- Is my new floorplan drawing located at the same x/y coordinates?
- Are there areas in my new floor plan that require transparencies (for use with LiveImaging)?

Knowing the answers to these questions in advance will make the task of updating MapSense easier and faster. Before you receive the new floorplan image, the architect designing the new plan can make this task easier using the following best practice guidelines below.

Performing the Procedure

Best Practice Guidelines

For easiest implementation, ensure that both the existing and new images:

- Are the same size/resolution (2875 x 2875 is the recommended maximum length of any one side within a given picture).

- Contain the same whitespace x/y coordinates (meaning that the actual drawing is in the same location relative to the whitespace on the page).
- Have the existing/new transparent areas created on the new image using GIMP.

If all the guidelines above apply, proceed to Step 3 in this document: “Reloading Your New Background Image, and Insert Your New Scale Calculation”.

Overall Floor Plan Update Process

The update process consists of these general steps. Note the programs used for each step:

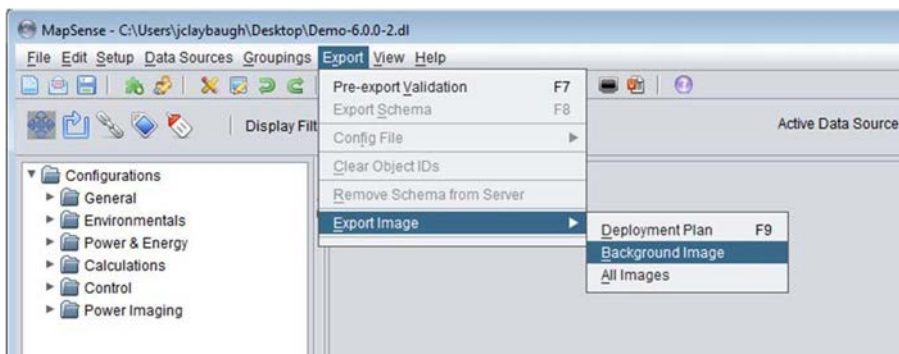
1. (MapSense) Backup your existing dl file.
2. (GIMP) Calculate your new scale.
3. (MapSense) Reload the background file with the new image.
4. (MapSense) Insert your new calculated scale.
5. (MapSense) Adjust object map to account for x/y location differences.
6. (GIMP) Create transparency areas in the new image if necessary.
7. (MapSense) Export the schema to the database and WebConsole.

Comparing Scale Information from New/Existing Floor Plan

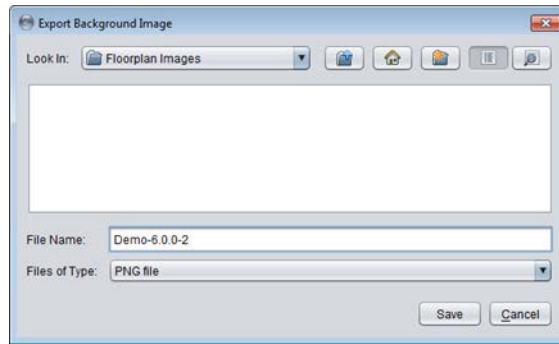
The steps below will help the administrator determine if the new floor plan image will need to be rescaled.

Step 1. Export Your Existing MapSense Floorplan Image

1. Open MapSense, load your existing dl project file, and select **Export->Export Image->Background**.

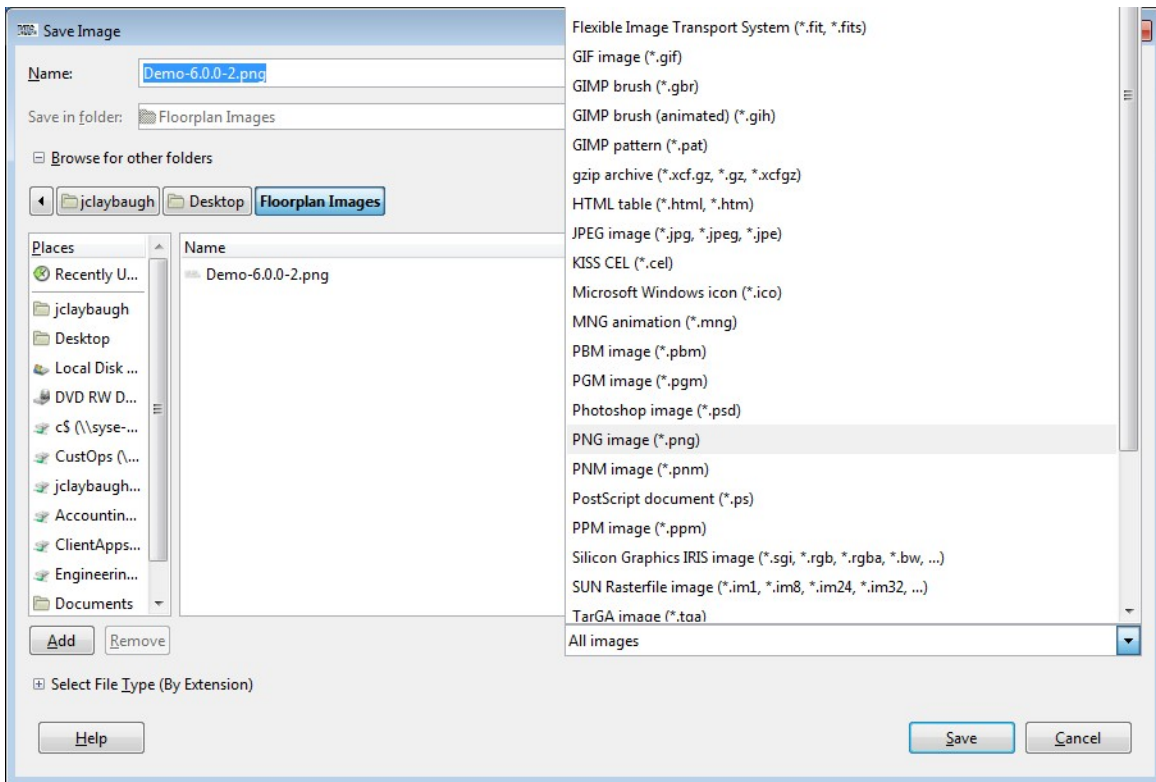


2. Save it to a folder of your choice.




Step 2. Convert Your New Floor Plan Image to a PNG Filetype Using GIMP

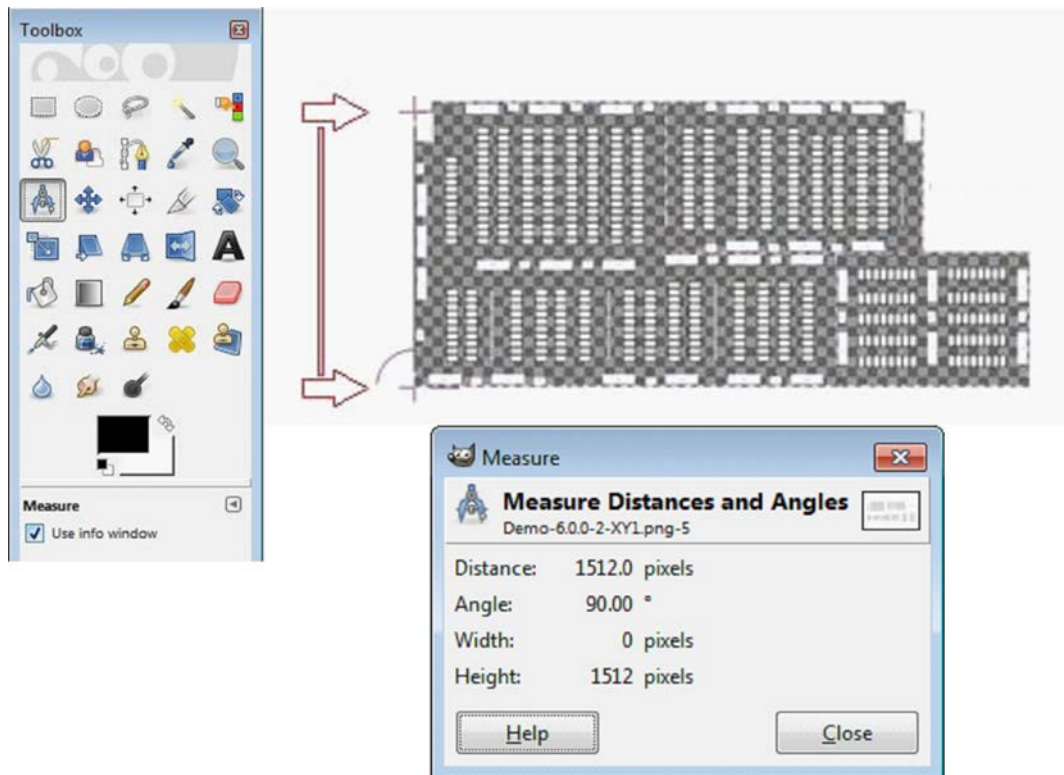
Note: If your new image is not currently in a “png” format, open it using GIMP, and select save as, choosing the file type as a **PNG** file. This is shown in the below image:



Step 3. Using GIMP, Compare a Pixel Measurement Between Old and New Images.

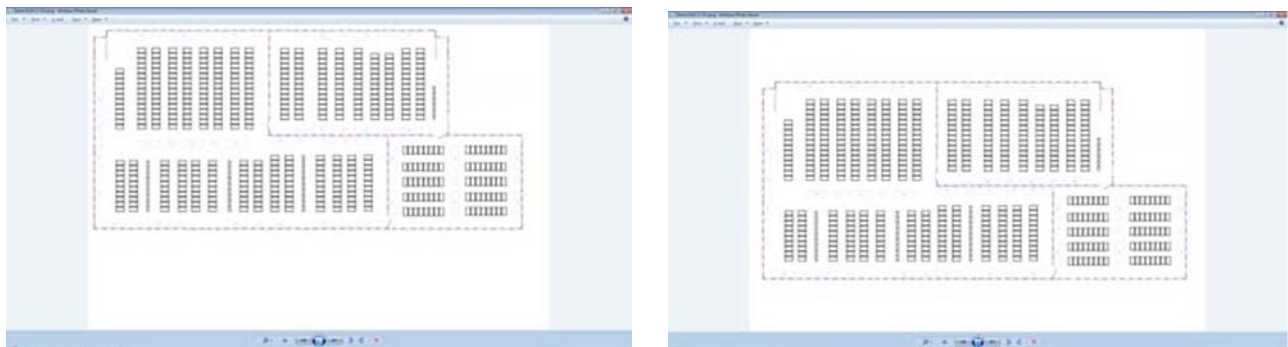
Open each image using GIMP, and measure the same section (by pixel) on each image using the measuring tool. 

In the example below, the left wall is being measured. Remember to check the **Use Info Window** button to see the full measurement information. Keep these pixel measurements at hand, as we will use them to calculate your new scale.



If both measurements are different, you will need to rescale the object map in MapSense. Directions for this can be found in the following section of this document.

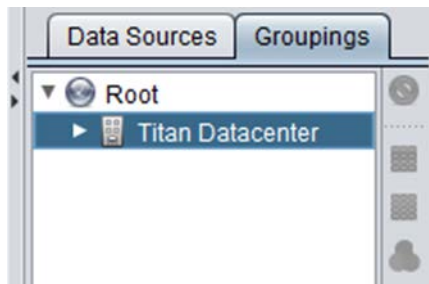
In addition, note if your floor plan is framed in the same position (an example of floor plans that do not match can be found below).



Rescaling your floor plan image

Step 1. Find the Existing MapSenseScale

Using MapSense, open your existing .dlz file. On the right column, select 'Groupings', then select your data center name (in this example, it is called Titan Datacenter). In the lower-right corner, the properties table shows a value named "Scale". The value listed is the scale of pixels to feet on this particular data center floor plan (0.661653347 feet per pixel).



Property	Value
Scale	0.661653347...
Name	Titan Datacen...
Configuration	DataCenter
Description	A large roo... ..

Step 2. Calculate Your New Image Scale.

To find your new image scale, divide the new pixel measurement by the existing pixel measurement:

$$1512px / 1206px = 1.253731343$$

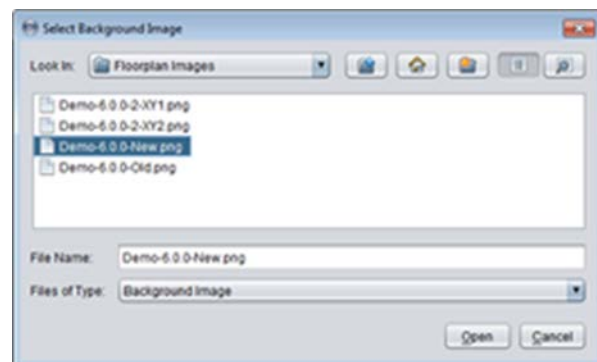
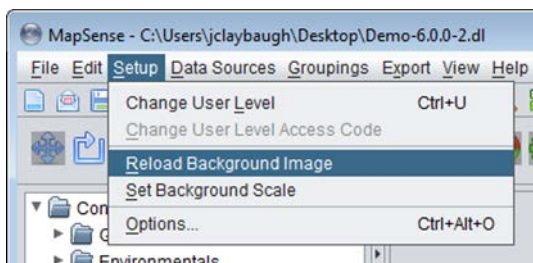
Next, multiply it by your existing MapSense scale value:

$$0.661653347 \times 1.253731343 = 0.829535539$$

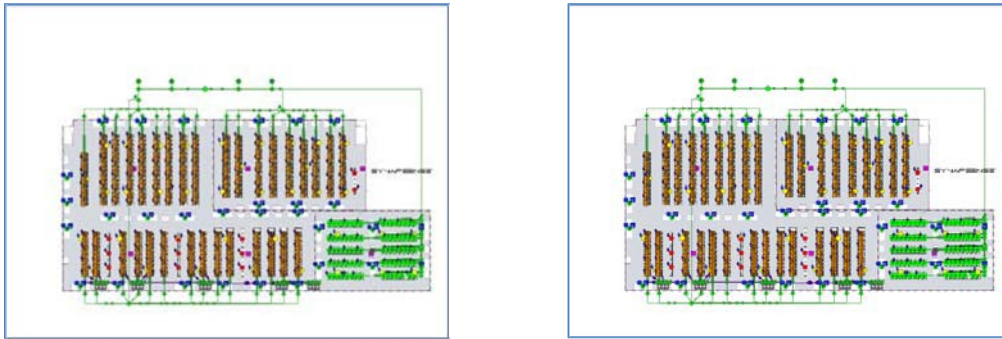
(This will be your new MapSense scale value.) Keep this number ready for the next step.

Step 3. Reload Your New Background Image, and Insert Your New Scale Calculation.

In MapSense, open your existing project (.dlz) file, and select Setup-> Reload Background Image -> choosing the new floor plan .png file you want to use.



Once loaded, you will notice that the MapSense icons are not in their proper locations.



Compare the two images.

This is where the calculations from Step 2 are used. Select the data center name from the **Groupings** tab, and replace the value in the **Scale** tab with the new scale value calculated earlier. This will space all the MapSense objects to match the new floor plan size. It should look something more like the diagram below.



Step 4. Reposition All the Objects onto the New Image

Finally, to reposition your objects on their correct rows, click on a single object in MapSense, and select the **Edit->Select All** menu (Ctrl-A). You can now drag the entire object map to the correct x/y location.



Once completed, you have a couple more steps to complete before it is loaded in Web Console:

1. Create the transparent areas (information on this can be in the MapSense user guide).
2. Export the schema (using Export->Export Schema). Remember to raise your security level before exporting.