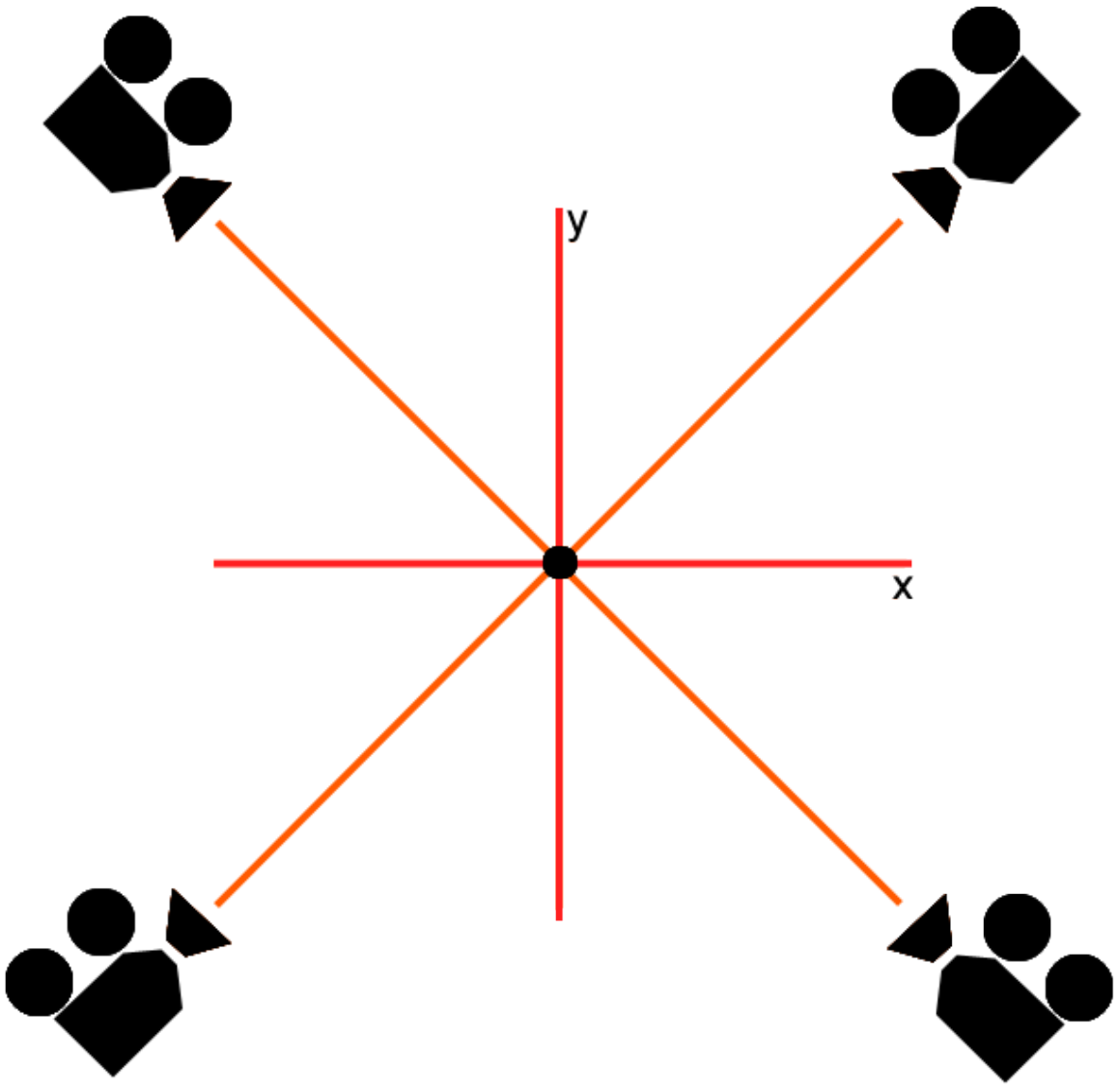
Rendering Workflow for:

php Kitchen Planner

Standard 3D Isometric Scene

Both applications: **php Kitchen Planner** and **Plano** supports isometric (orthogonal) 3D representation. The standard scenery is currently made only in Autodesk 3D Studio Max. The standard scenery (**.max** related scene file) contains animated camera positions, lighting and rendering output settings that are compatible with our current planning application standards.



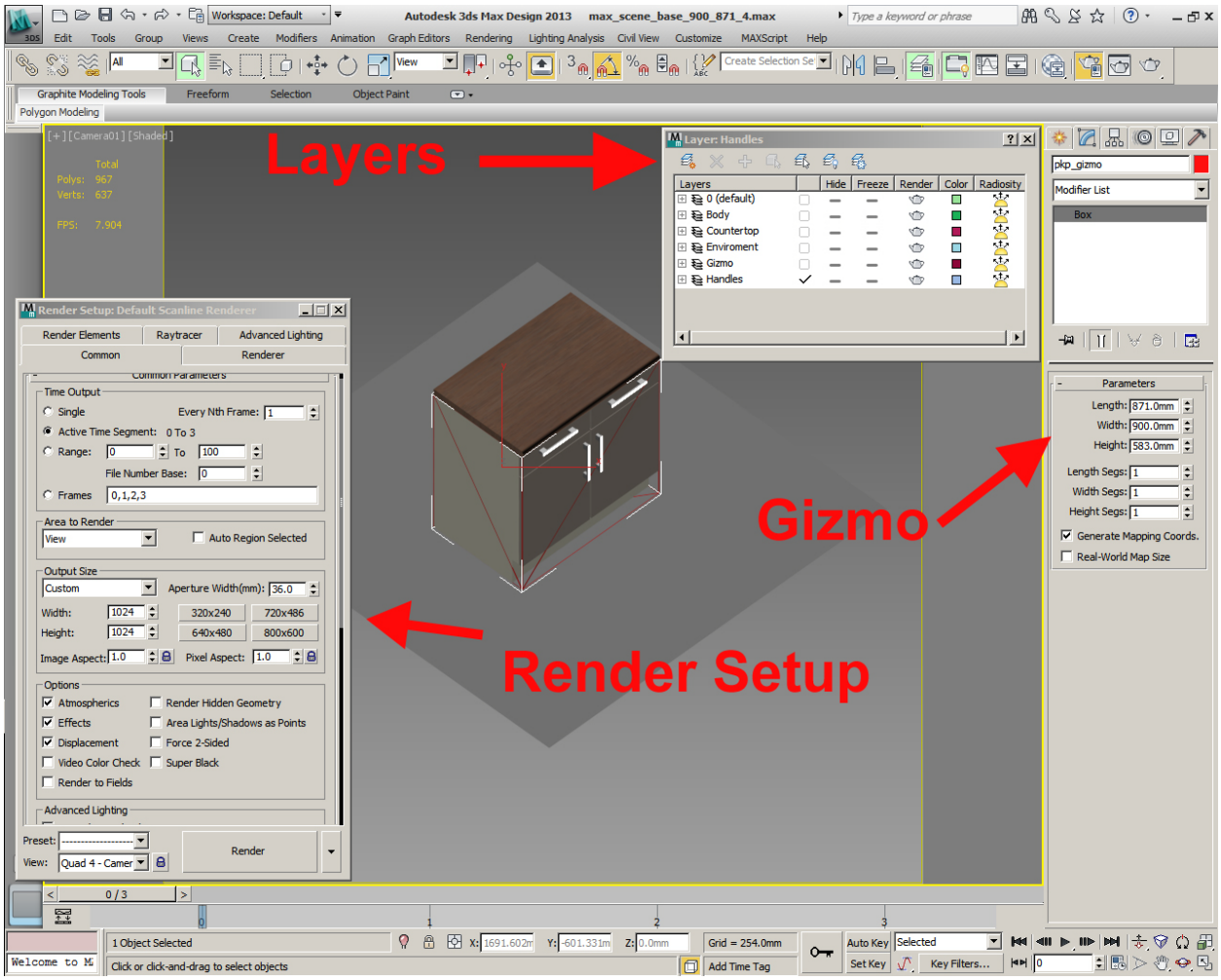
4 angle rotation isometric camera

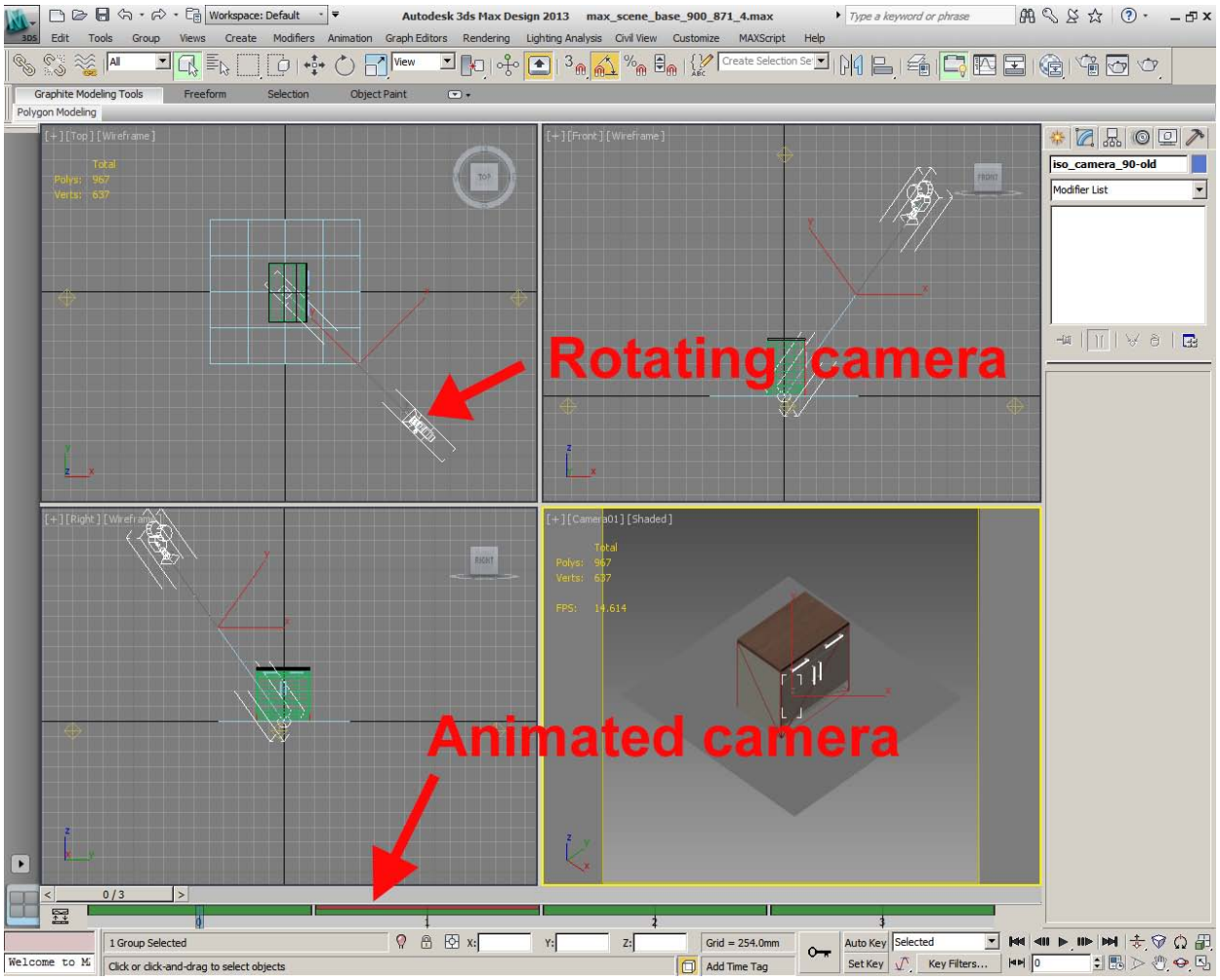
The Autodesk 3D Studio Max scene contains the following elements to comply with application standards:

- One animated isometric (orthogonal) camera. The camera rotates around origin at **4 angles**: **0, 90, 180 and 270** degree.
- Managed layers. Layered objects/elements in the scene. The standard layers are: **Environment, Body, Handle, Countertop and Gizmo**. Layers can be removed or added depending on each rendering process requirements.
- Gizmo measurement wireframe cube (red). All objects in the application are seen as sized cubes/rectangles even if the actual rendered objects aren't. The gizmo is used only to verify sizes, scale or size proportions.
- Render Setup. **Time Output Active Segment: 0 to 3. Output size: 1024x1024 and render output file must be in .PNG.**

Other 3D modeling and rendering software can be used to create a standard scene for the application.

Below you have 2 screenshots with a scene in 3D Studio Max 2013 with the most important settings.





Light settings can be different depending on object position and mesh structure.

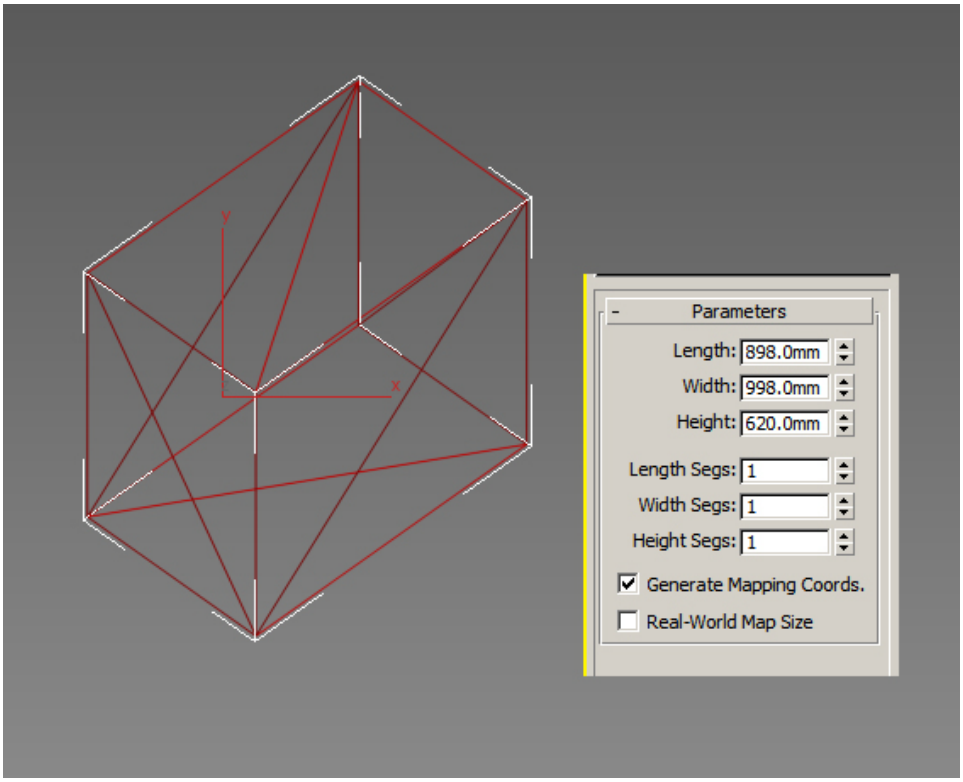
3D Modeling and Applying Material

Before rendering it needs first to model the objects and apply the required materials. The modeling can be an easy or a difficult task depending on how complex an object can be. You can model either separate in a default scene and merge it or directly inside the standard scenery. While modeling you can distribute each element in layers such as: body, front doors, handle, countertops, etc., to manage the objects more easily. Another important aspect is to keep the modeled objects size correct.

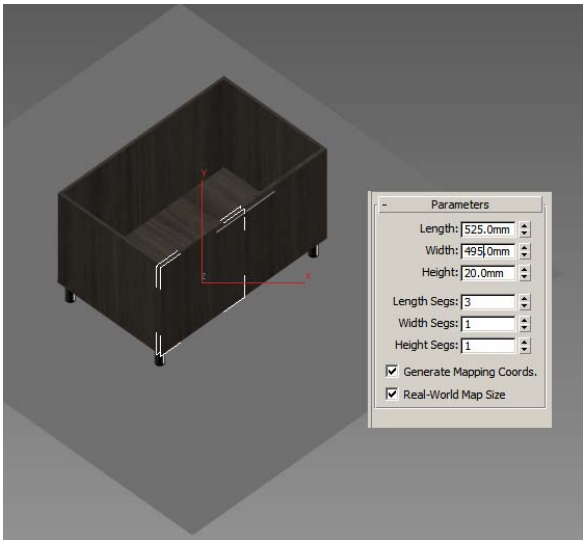
The standard recommended workflow for modeling modular-based cabinets is:

1. Before modeling each cabinet (**s.a.** base unit, wall unit, tall unit etc.) is best to adjust the size of the gizmo, ones adjusted, it needs to correlate with the cabinet size you want to model. The

gizmo will help you verify and keep the correct size (width, length and height) of the entire structure of the cabinet.



2. In this document we discuss the situation when we model kitchen cabinets or cabinets that are similar to kitchens in design.
We start with modeling the cabinet by creating side panels, back panel, bottom skirt or legs, front doors, countertop, handles, etc. Each element can be filtered per layer.



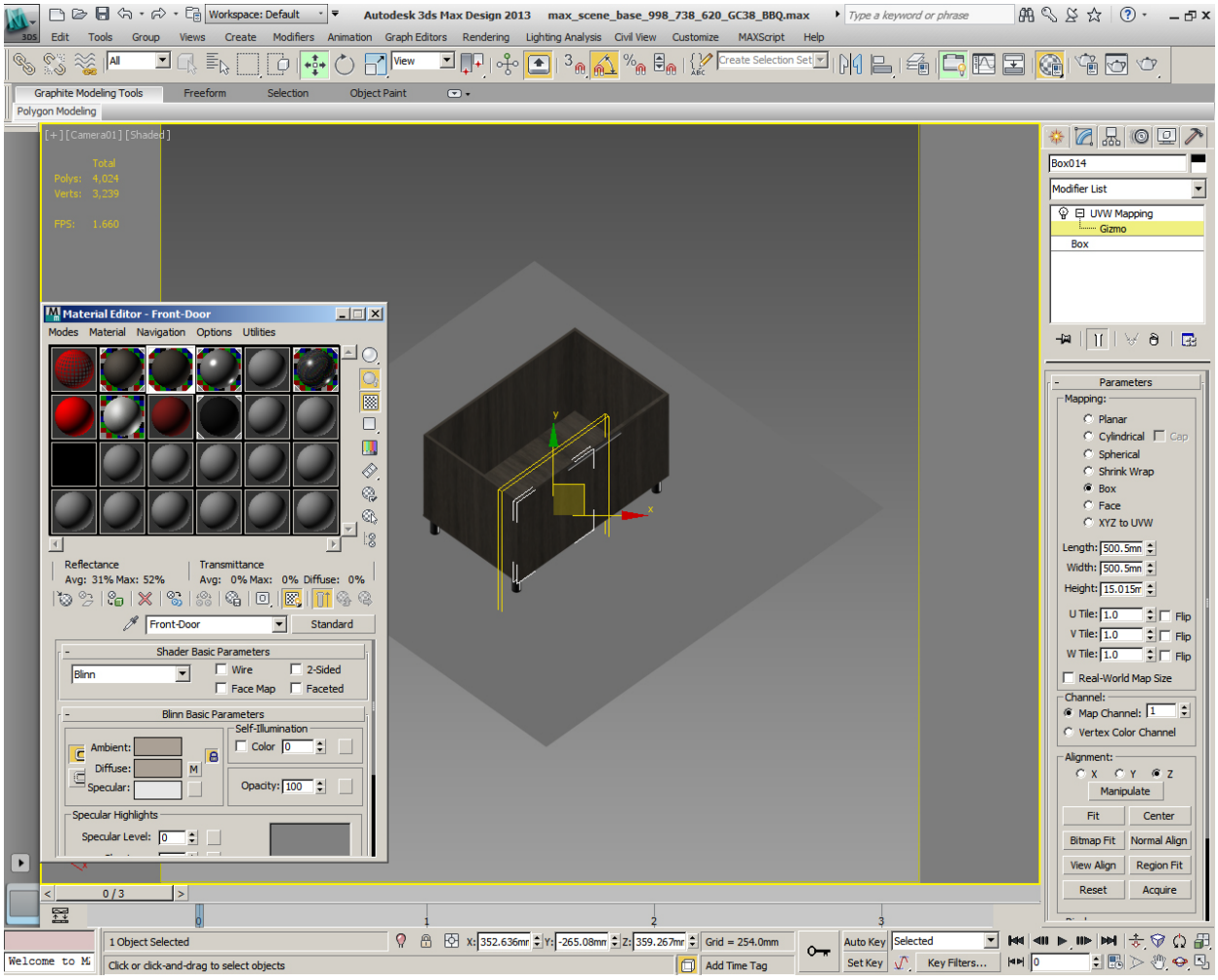
TIP: Your first modeled cabinet can be also your base design upon which you can build the rest of the cabinet sizes.

The modeling of each component can be done in such a way to easily rescale the panels to other sizes for other type of cabinets.

In this way you can redesign different cabinet sizes from your base design and minimize your workload. Hence each modified cabinet becomes a unique scene (**s.a.** base_unit_756.max, base_unit_810.max, etc.)

3. Since the first cabinet you model is also your base design, set and test the materials you will use before you go further to model other sizes. Open material editor and assign to each element the required map and texture or/and shader.

TIP: The cabinet may support more than one texture so make sure you have material slots for each texture you may use.



4. Go to Render Setup verify the standard settings and proceed to rendering. **Regarding setting the Render Output file and save location will discuss in next chapter.**

TIP: Always is best to test a few rendered cabinets inside client's application repository before you get to render more files. This way you know your renderings are properly aligning and are correctly sized.

In the right image you have a quality output rendering sample at 0 degree angle.

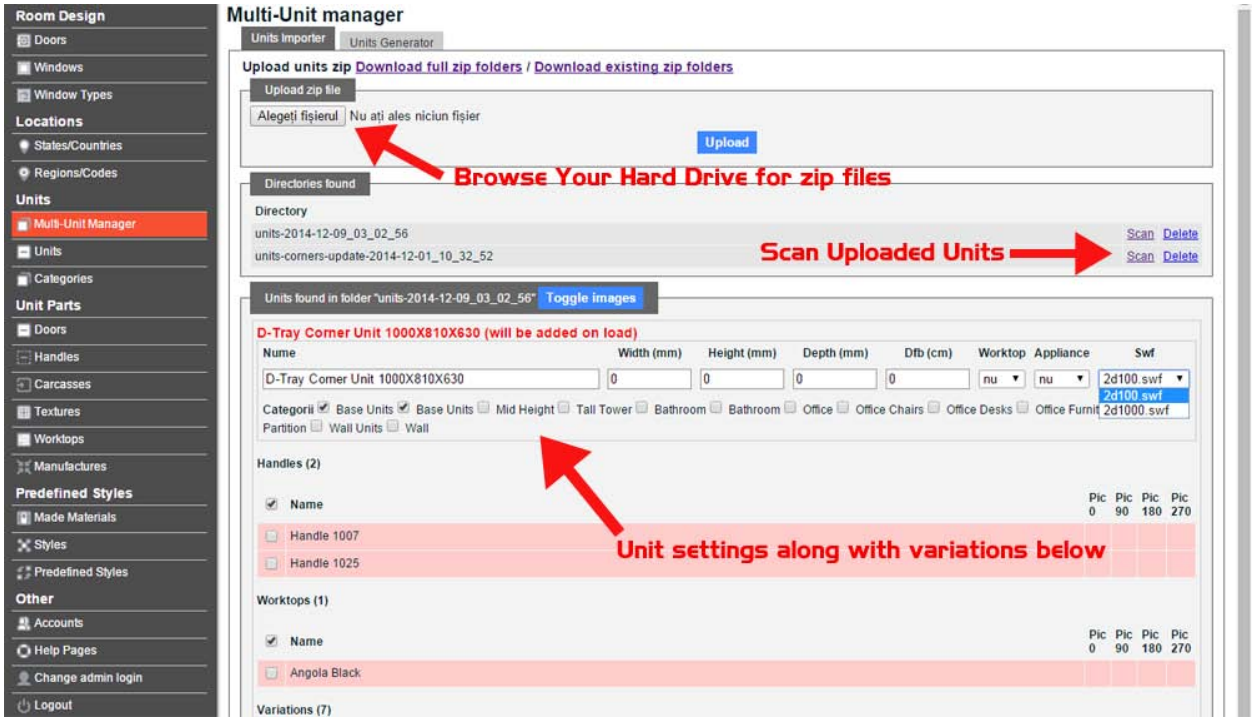
In the sample there are 4 material slots involved: bark wood for body and front doors, chrome and basalt stone. In this situation the countertop includes also a barbeque appliance and an additional piece of stone at the back.

Multi-Unit Manager and Mass Upload

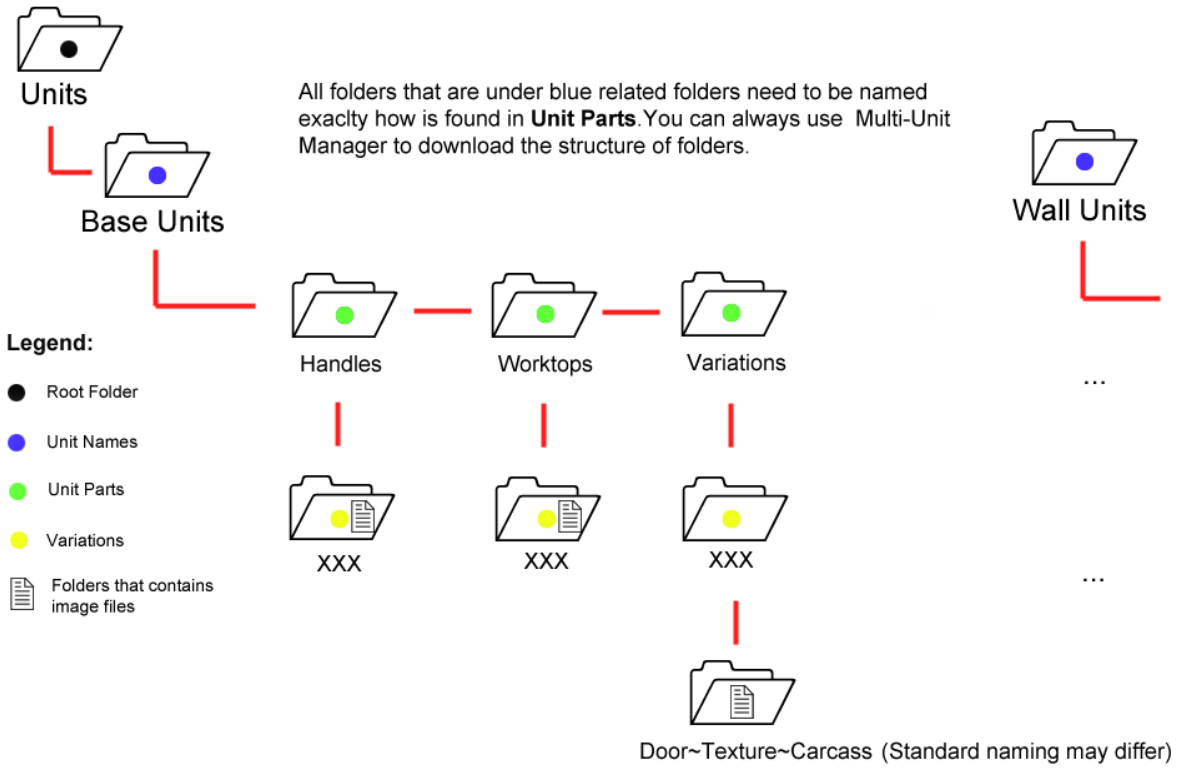
The platform uses 2 ways of uploading units: one-by-one through **Units** section and another way using **Multi-Unit Manager** for mass uploading. php Kitchen Planner has a smart way to upload units into the database using the **Multi-Unit Manager module**. The module can upload and generate multiple units.
Multi-Unit Manager has 2 main sections: **Units Importer** and **Units Generator**:

Units Importer

Units Importer is a tool where gives you the ability to upload .zip files with images and data and load them into database.



Multi-Unit Importer cannot import and unzip any type of .zip file. The zip file must contain a particular **folder tree structure** supported by the platform. See the image below:



Basically the root folder contains other folders that keep particular unit parts such as: handles, worktops, variations.
You can always download the folders structure into your computer if are in database.

Units Generator

The other tab found in Multi-Unit Manager is **Units Generator**. In case if you want to create folders (units) from scratch in the database and then download them into your computer Units generator can be very handy for you.

HINTS!

1. **Keep the name of the zip file maximum 5 characters (ONLY LETTERS RECOMMENDED)**
2. **Recommended upload file no larger than 25 mb (NOW DEPENDS ON SERVER PERFORMANCE ALSO) another option is: you can load folders directly through ftp without zip.**
3. **After loading units into Units section (in the database) please enable each unit by assigning location and manufacture and save unit if is needed, otherwise will not show in front-end.**