



CEP 2.3 DM Tool Systems

DM Placeable Attitude Adjuster
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Good morning, class! Today's lesson: the DM Placeable Attitude Adjuster, colloquially known as "The Pepper". The Pepper was originally designed to adjust the coordinates and facing of placeables spawned in game by DMs off the palette. Other options were added later, and they will all be discussed in this lesson, so don't get any ideas about class letting out early!

(groans from the class)

Now, on with the lesson. As I stated, the primary function of the pepper is to adjust the coordinates and facing of placeables. Yes?

But the engine doesn't allow you to move placeables, does it?

No it doesn't. I see you've been studying, very good! No, the script language does not provide a function to move a placeable. Therefore... we cheat. If you can't move it, why not just destroy it and re-create it where you want it? There are, of course, some issues with this method. Although the code does preserve name, description, plot and useable flags, and tag, it does not preserve anything else that may differ from its blueprint. No custom appearances, no variables, etc. The selected placeable is destroyed, then a new one created from the resref of the old, and the name/tag/description/flags set appropriately. This will rarely be a problem, as 99.5% of the placeables you will want to adjust have been spawned in-game by a DM.

Now, enough of the theory. Let's actually take a look at how to use the thing, hmm?

First, target the placeable with the pepper. If your placeable is not useable, target the ground close to it. If you have selected the wrong placeable, use the final option on the menu, "Select a different placeable.", then select the placeable you wish to work with. Yes?

Mine says "ERROR: No placeables in target area."

Move closer to the placeable you're trying to target, and try again. Better? Good.



DM Malishara
 Selected placeable: Lecturn
 Tag: Lecturn
 Location: 39.50x, 63.50y, 0.00z
 Facing: 270

1. Adjust location by facing or direction.
2. Adjust facing.
3. Reset to original position.
4. Teleport me to Lecturn.
5. Teleport Lecturn to me.
6. Teleport Lecturn to me - flipped.
7. Toggle PLOT flag. (currently ON)
8. Toggle USEABLE flag. (currently OFF)
9. Re-tag Lecturn from name.
10. Select a different placeable.
11. Cancel.

Now, I will demonstrate how to use the pepper on this lecturn. As you can see, it is much too high... I can't even see over it! I cannot imagine why they make them so high... anyway, I'll select it with the pepper. As you can see, the currently selected placeable's name, tag, coordinates and facing are displayed. I will choose the first option, "Adjust location by facing or direction." Let's cut it down to a proper size.

First, we select "Change the direction of movement", then change it to "Down". We certainly don't want it any higher!



DM Malishara
 Selected placeable: Lecturn
 Tag: Lecturn
 Location: 39.50x, 63.50y, 0.00z
 Facing: 270
 Current direction of movement: forward

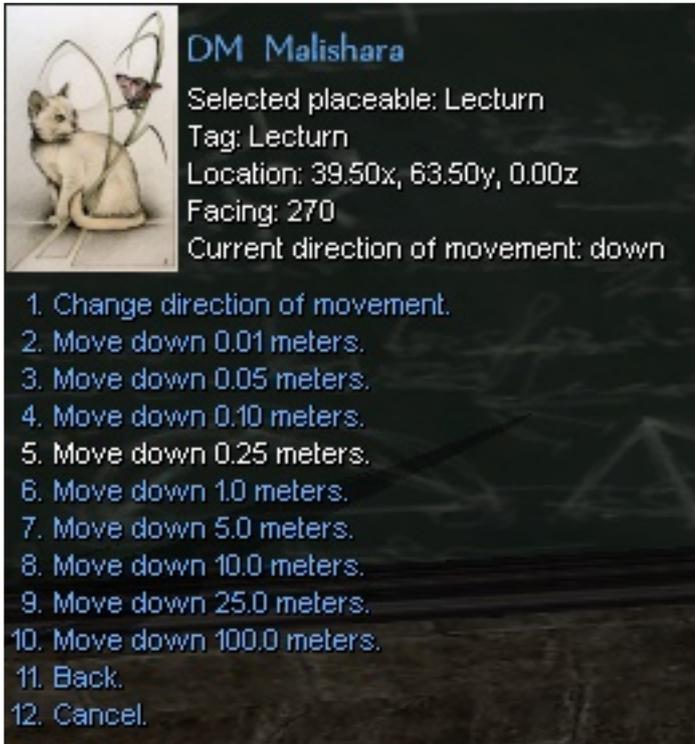
1. Change direction of movement.
2. Move forward 0.01 meters.
3. Move forward 0.05 meters.
4. Move forward 0.10 meters.
5. Move forward 0.25 meters.
6. Move forward 1.0 meters.
7. Move forward 5.0 meters.
8. Move forward 10.0 meters.
9. Move forward 25.0 meters.
10. Move forward 100.0 meters.
11. Back.
12. Cancel.



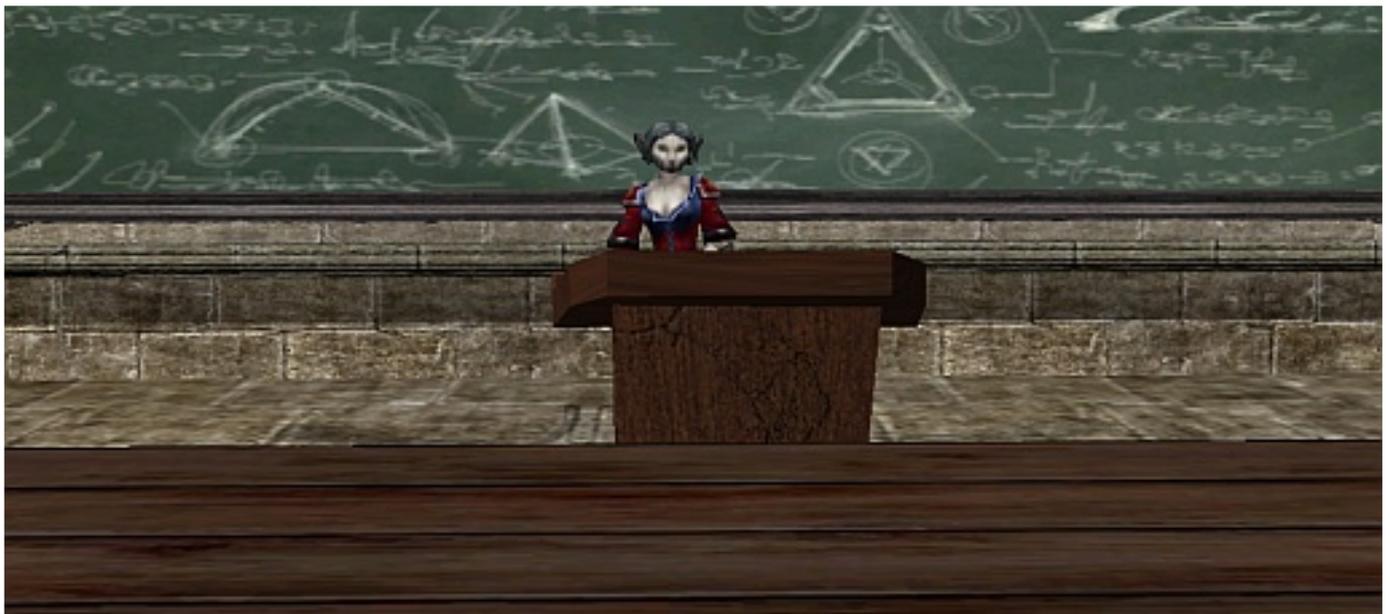
DM Malishara
 Which direction?
 (North = +y, South = -y)
 (East = +x, West = -x)
 (Up = +z, Down = -z)

1. Forward.
2. Backward.
3. Left.
4. Right.
5. Up.
6. Down.
7. North.
8. South.
9. East.
10. West.
11. Northeast.
12. Northwest.
13. Southeast.
14. Southwest.
15. Back.
16. Cancel.

See the crib notes? The pepper reminds you which way to move something if you are trying to adjust a placeable to exact x/y/z coordinates. This can be very helpful in some instances. As you can see, we can not only move along a specific direction, but also relative to the placeable's facing: Forward, Backward, Left, and Right.



We'll just drop it down a bit now, say... -0.40 or so. We can adjust it in various increments. 0.25, 0.10, and 0.05 will add up to 0.40, so let's do those.



Now, this is much more reasonable! Why they don't just make them the proper size to start with, I have no idea...

As previously noted, you can set the direction of movement to various compass directions (North, South, East, West, Northeast, Northwest, Southeast, Southwest), Up or Down, or relative to its facing (Forward, Backward, Left, Right). Be aware that not all models will be facing the way you think... some are "backwards". For example, some ship models have their bow facing 180 degrees from what the engine facing is.

Now, let's look at a few examples of what you can do with the pepper.



An empty room is a blank slate... you can make of it what you wish.



Like a classroom. All the props here are aligned properly, thanks to the pepper. The map is flush with the wall, the books are on top of the desks instead of on the floor... and the lectern is the proper height.

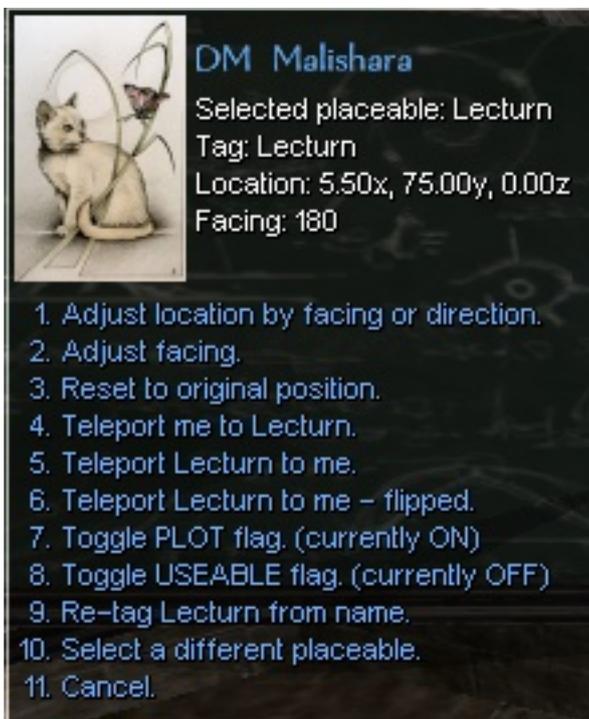
Or, maybe a bedroom, with a sitting area...



The pepper gives you the precision of the toolset in-game.

Now, let's say you've adjusted an object, and want to put it back where it was before you starting tinkering with it. (Maybe a giant is going to teach a class on dwarf tossing, and you want to put the lecturn back to its original, excessive height.) Just use the "Reset to original position" option, and it will be returned to where it was.

Now, let's take a look at the next three menu options, the teleport options.



The teleport options are pretty straightforward. "Teleport me to object" does just that. Its primary use is to locate an object you have trouble spotting. "Teleport object to me" does the opposite. Useful for bringing something to you, so you can work with it. You can select a placeable, then go to another area, and bring it you. Now, weren't those easy?

Yes? Question?

What about the "Teleport object to me - flipped" option?

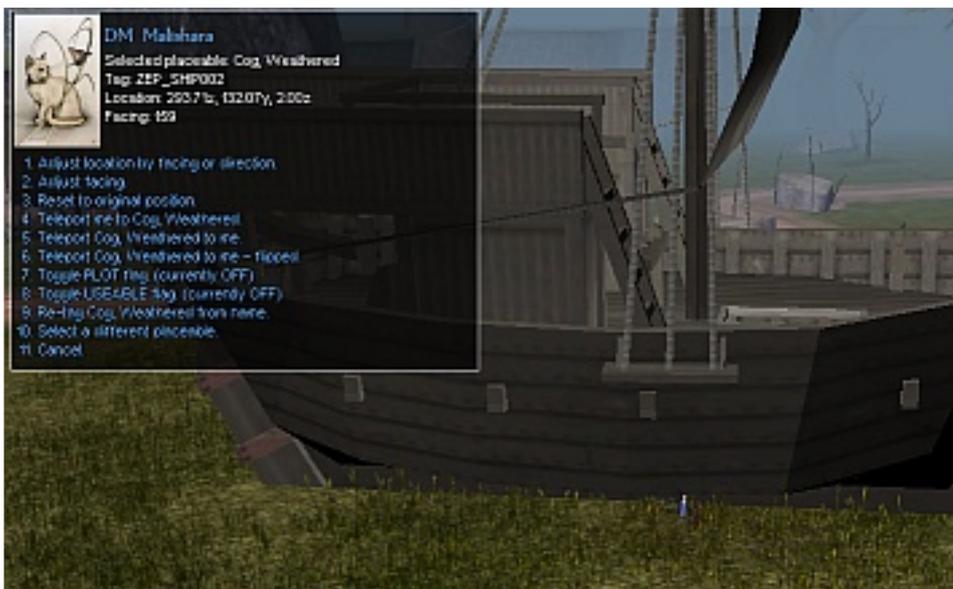
Ah, well... that involves a rather interesting side-effect of the pepper. Let's go on a field trip to demonstrate.

Don't forget to bring your lunches!



What? I said it was a FIELD trip! Now, let's find our volunteer... Aha! There it is.

I'll select this cog, and teleport it to me...



As you can see, the cog was teleported to my location. Now, someone get this thing off my head!

grumbles Okay... you can use this method to simulate movement. Just teleport an object to you, walk a short distance, and teleport it again. The placeable will be teleported to your x/y coordinates, but retain its zenith. So, if you're moving a flying ship, it will keep flying.

Another way of moving objects is simply to use the options to adjust facing and location. Just turn it 20 degrees or more, and move it forward.

Now, if there's no questions... Yes?

What about the "flipped" option?

Oh, right! Well, not all models "face" the logical direction. Some are "backwards". For example, you would expect that a ship would have its bow facing whatever direction the engine says it is facing... unfortunately, that is not always true.



This ship, besides being very, very large, faces the wrong way. You have to use the "flipped" option on it when teleporting it, or it will look like it's sailing backwards.

Okay, is everyone done with their lunch? Good, now... er, what's that?



Ah, it looks like that last ship was a cargo ship. We'll just use these crates to demonstrate the next two options on the pepper menu.

Let's say we want to set up a bunch of crates... maybe for a merchant camp, or on a dock. You DO know what will happen when a player comes along, right? RIGHT? The very first thing most players will do when they see a crate is... OPEN IT! Which is good if you're using it to place items for them to find. It's not so good if you're trying to get them to RP with the NPC standing there. (Unless you want to threaten to turn them over to the guards or something.) So, what if we want to have the crates there to look at, but not to be used?



DM Malishara
Selected placeable: Crate
Tag: x2_medium_crate4
Location: 286.90x, 124.97y, 0.00z
Facing: 138

1. Adjust location by facing or direction.
2. Adjust facing.
3. Reset to original position.
4. Teleport me to Crate.
5. Teleport Crate to me.
6. Teleport Crate to me – flipped.
7. Toggle PLOT flag. (currently OFF)
8. Toggle USEABLE flag. (currently ON)
9. Re-tag Crate from name.
10. Select a different placeable.
11. Cancel.

We use the option to toggle the USEABLE flag. Currently, it is ON. Toggling it will set it to OFF, making it... unusable!

Ha! That will stop those players!

Well, not quite. Determined, they are. If they can't open it, they'll resort to destroying it. While they cannot target it to bash it, it might be possible to destroy it with a fireball or something... Which brings us to the previous option on the menu...

Setting the PLOT flag ON will, of course, prevent it from being destroyed. So, let's toggle that now...



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Tag: x2_medium_crate4
Location: 286.90x, 124.97y, 0.00z
Facing: 138

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5. Teleport Crate to me.
6. Teleport Crate to me – flipped.
7. Toggle PLOT flag. (currently ON)
8. Toggle USEABLE flag. (currently OFF)
9. Re-tag Crate from name.
10. Select a different placeable.
11. Cancel.

So, the crate now cannot be used, nor can it be destroyed.

There are, of course, many other applications... I often will set a bench unusable, then overlay two or more invisible chairs on it, providing more seating than the bench itself would give.

The final option (excluding Cancel), is the option to re-tag the selected placeable from the name. For example, if the object name is "Red chair", the new tag would be "Red_chair". Changing the tag of a placeable is done to allow the placeable to be used by scripts in some way. As scripts are generally highly module specific, we won't go into examples here.

That pretty much covers the functions of the DM Placeable Attitude Adjuster. If you have any further questions, leave them in my mailbox. Class is now dismissed.

(Many cheers from the class as they shove chairs back and head for the door.)

See you next week for the class on the DM Stage Manager.

(Groans...)

