

## Welcome

Hello everyone and welcome to my tutorial on making CivIII units. I'm going to try to be as thorough as possible in my description of my process for creating units; however, some parts may not be clear to all readers. I apologize in advance. The main parts of the tutorial will deal with organizing a file structure to keep your files straight, gathering resources and sorting where to put them in your computer, building a unit model in Poser out of the models and figures that you've found, animating the unit, rendering the animations, and finalizing the unit to make it playable in CivIII. I hope that the CivIII modding community will benefit from this tutorial and that we will see many great units being produced in the future.

Torey Hickman

## Programs needed

Here's a list of all the programs that I will be using in this tutorial. Not all of the programs are absolutely necessary. For example, both Photoshop and Paint Shop Pro are not needed; I simply find that each is better for certain tasks than the other. Now, here's the list. Hopefully, my instructions will be clear enough so that you can use the programs without any prior experience. Most of the programs are free or have free trial periods; I think Poser 5 and Photoshop are the only exceptions.

Poser 5

<http://www.curioslabs.com/go/poser5>

UV Mapper

<http://www.uvmapper.com/downloads.html>

Paint Shop Pro 3.0

<http://www.corel.com>

Steph's Storyboard Builder

<http://forums.civfanatics.com/showthread.php?s=&threadid=42092>

pEdit

<http://www.agentur-simon.de/pedit/>

FLICster (build 18)

<http://forums.civfanatics.com/showthread.php?s=&threadid=10208>

Photoshop 7.0

<http://www.adobe.com/products/photoshop/main.html>

unFREEz

<http://www.whitsoftdev.com/unfreez/>

## Organization

### *Part 1, CivIII Creation Folder*

Before getting started with gathering resources and putting the model together, we have to have some place to store all of the files. This can be done anywhere, but this is the organizational system that I feel comfortable with. In discussing the rest of the process, I'll be referring back to the folders that you're creating here.

1. Create a folder on your hard drive named *CivIII Creation*.
2. Create within the folder *CivIII Creation* a subfolder *New Unit*. In this folder you will keep folders and files that you will use for your future units so that you do not have to create new folders and other files over again.
3. Create within the folder *New Unit* a subfolder *Animation Folders*.
4. Create within the folder *Animation Folders* a folder for the animations that you choose. I have folders for the attacka, attackb, death, default, fortify, and run animations because they are the ones that I regularly use. I don't generally make victory or fidget animations, but you may create these extra folders if you wish.
5. Within the *AttackA* folder create eight subfolders--one for each direction in CivIII. Be sure to name them *S*, *SE*, *E*, *NE*, *N*, *NW*, *W*, and *SW*. If you name them something else, you will have problems later.
6. Now go back to the folder *New Unit* and within this folder, create a second subfolder named *Texture Maps*.
7. Now go back to the folder *CivIII Creation* and create a subfolder named *Spanish Pike*.
8. Create within the folder *Spanish Pike* a subfolder named *Props*.
9. Create within the folder *Spanish Pike* a second subfolder named *Preview*.

10. Now go back to the folder *CivIII Creation\New Unit* and copy the folder named *Animation Folders*. Now go back to the folder *CivIII Creation\Spanish Pike* and paste the folder *Animation Folders*.

## Organization

### *Part 2, Poser Folder*

As you gather your resources, you will find that some are simply 3D models (.obj, .3ds, etc.), but some are also going to come ready for use in Poser. You can also find figures and animations. In order to easily find items that you collect for CivIII unit making purposes, we will create places inside the Poser library for these figures, props, and animations to go.

1. Within the *Poser5* folder, find the *Runtime\libraries* folder.
2. Within the *libraries* folder, you will see various subfolders. Among them are *character*, *pose*, and *props*.
3. In the *libraries\character* folder, create a subfolder named *CivIII Figures*.
4. In the *libraries\pose* folder, create a subfolder named *CivIII Animations*.
5. In the *libraries\props* folder, create a subfolder named *CivIII Props*.

## Organization

### *Part 3, Poser Setup*

One of the hardest things to do in Poser is to create a system of lights, colors, etc. that will allow your creation to fit in with the over look of CivIII. Fortunately, Kinboat was kind enough to post his setup that he uses. With the help of ripptide, this was converted to use in Poser 5. It's all ready to create units from.

1. Download my Poser5 setup file. If you're using Poser4, this file may not open. In that case you should use Kinboat's setup, which is for Poser4.  
[http://www.civfanatics.net/uploads9/new\\_unit\\_setup.zip](http://www.civfanatics.net/uploads9/new_unit_setup.zip)

2. Extract the file to your *CivIII Creation\New Unit* folder.

## Gathering Resources

### *Part 1, Kinboat's Paperdoll and Stuff*

Well, not only did Kinboat provide a setup file for other users to work with, he has also created a CivIII like human model and some clothing items for him to wear--he also has a female model, but I have yet to use this. I've been using Kinboat's paperdoll for the last few months because I think that it looks more Civ-like than the DAZ or stock Poser figures. For the unit that we'll create in this tutorial, you will need to download some of Kinboat's creations.

1. In your Internet browser, open Kinboat's thread at Civfanatics where he posts his models. The link is below.

<http://forums.civfanatics.com/showthread.php?p=1397395>

2. Download his original paperdoll: *paperdoll.zip*. Even though he has an improved model, we need the run animations located here.

3. Extract the files to your desktop. You'll move them shortly.

4. Move all the files that begin with *Run* (e.g. *Run NA 2 Loincloth.png*) to your Poser *runtime\libraries\pose\CivIII Animations* folder. We won't be using all of them, but it won't hurt to have them there for future use.

5. Now download Kinboat's improved human model: *Paperdoll\_Male.zip*.

6. Extract the files to your desktop again.

7. Move all the files--not the folder--to your Poser *runtime\libraries\character\CivIII Figures* folder.

8. Now download Kinboat's PDM footwear: *PDM\_Footwear.zip*.

9. Extract the files to your desktop. You will see that the files are located in a folder structure like that of Poser.

10. Move all twelve of the files (e.g. *PDM Boots 1.cr2*) to your Poser *runtime\libraries\character\CivIII Figures* folder.

11. Now download Kinboat's serf clothing: *Serf\_Suit.zip*.

12. Extract the files to your desktop.

13. Move the three files (e.g. *PDM Serf.cr2*) to your Poser *runtime\libraries\character\CivIII Figures* folder.

## Gathering Resources

### *Part 2, Some Extras Needed*

Despite the number of items that Kinboat has posted for use with his paperdoll, he cannot of course create every prop or piece of clothing needed for every unit that someone might wish to make. I would always recommend using or adapting Kinboat's work if possible because I like the look of his modeling. But, if there's something else that you need, you will have to look elsewhere. There are numerous sites online where you can find free 3D models that are available for use, or you can buy some. I would be careful though because many times these other models are created to look like they would in real life, and you will need to adapt them to match the look and feel of CivIII. Another option is to create some models yourself. For the unit that we will be making, I have made a couple of simple props and adapted a Kinboat figure. One of the props comes ready as a Poser smart prop; two are just .3ds models. But, you'll see how to add both types to your unit.

1. Download some props I made.  
[http://www.civfanatics.net/uploads9/spanish\\_stuff.zip](http://www.civfanatics.net/uploads9/spanish_stuff.zip)
2. Extract the units to your desktop.
3. Move the three *Kilt 4* files to your Poser *runtime\libraries\character\CivIII Figures* folder. This kilt was originally the hip from Kinboat's Greek Armor. I exported it and made a figure with just the kilt and no armor.
4. Move the two *Spear* files to your Poser *runtime\libraries\props\CivIII Props* folder.
5. Move the *Hair\_and\_Helm.3ds* and *Spanish\_Shield.3ds* files to you *CivIII Creation\Spanish Pike\Props* folder.

## Building the Model

### *Part 1, Adding the Paperdoll Figure.*

Here we'll add Kinboat's paperdoll to the scene. We'll build the rest of our unit off of this figure, so we'd better have it in the scene first.

1. Open Poser.
2. Open the file *CivIII Creation\New Unit\new unit setup.pz3*
3. Make the Libraries window viewable. (Window>Libraries)
4. In the Libraries window, click on *Figures*.
5. Now click on *Civ III Figures*
6. Click once on the *Paperdoll Male*.
7. At the bottom of the Libraries window, click on the double checkmark.
8. Select a part of the PDM model.
9. Click on Figure>Set Figure Parent.
10. Select ROTATE BALL, and click OK. (My mac version of Poser has an OK button. I don't remember what the Windows version's button is called, but it's not the cancel button.)
11. Save the file as *S Base.pz3* in your *CivIII Creation\Spanish Pike\* Folder.

## Building the Model

### *Part 2, (Re)assigning Materials*

This Spanish Pikeman that we're creating appears to have a pretty tight fitting white shirt and some dark gray tights on. Since these clothing items are so close-fitting, there is no need to use additional figures to represent them. We can simply recolor certain body parts of the paperdoll.

1. Make sure that the PDM figure is selected.
2. Open the Grouping Tool.
3. Below the animating window, click on Body Parts>Right Shoulder.
4. In the Grouping Tool window, click on Add All.
5. Click Assign Material ...
6. Name the material *Sleeves*.
7. Repeat steps 3 through 6 for the Right Forearm, Left Shoulder, and Left Forearm. Make sure that the material is named *Sleeves* each time.
8. Now click on Body Parts>Hip.
9. . In the Grouping Tool window, click on Add All.
10. Click Assign Material ...
11. Name the material *Tights*.

12. Repeat steps 8 through 11 for the Right Thigh, Right Shin, Right Foot, Left Thigh, Left Shin, and Left Foot.
13. Close the Grouping Editor window.
14. Go to the MATERIAL room.
15. Click Object:>PDM.
16. Click Material:>Sleeves.
17. Change the Diffuse\_Color to almost white. (e.g. R 240, G 240, B 240)
18. Change the Specular\_Color to black. (R 0, G 0, B 0)
19. Click Material:>Tights.
20. Change the Diffuse\_Color to a dark gray. (e.g. R 85, G 85, B 85)
21. Change the Specular\_Color to black.
22. Return to the POSE room.
23. Save *S Base.pz3*

## Building the Model

### *Part 3, Conforming Clothing*

Now we'll add some conforming clothing. We'll start simple with the shoes. We'll be using a pair of shoes that Kinboat made.

1. Open the Libraries window again, and navigate to Figures>CivIII Figures.
2. Click once on *PDM Shoes 1*.
3. Click the double checkmark button.
4. Make sure that the Shoes figure is selected.
5. Click Figure>Conform To ...>PDM.
6. Now open Window>Joint Editor.
7. Click the Zero Figure button. Close the Joint Editor window.
8. Go to the MATERIAL room.
9. Click Object:>Shoes
10. Click Material:>Shoes.
11. Change the Diffuse\_Color to a yellow-brown. (e.g. R 140, G 95, B 0)
12. Go to the POSE room.

13. Save.

## Building the Model

### *Part 4, More Conforming Clothing*

Here we'll add some more clothing. The process is almost the same as it was with the shoes. We'll just have to move the next figure's hip and make some body parts invisible.

1. Open the Libraries window again, and navigate to Figures>CivIII Figures.
2. Click once on *PDM Serf*.
3. Click the double checkmark button.
4. Make sure the PDM Serf figure is selected.
5. Click Figure>Conform To ...>PDM.
6. Click Body Part>Hip.
7. Set the xTran, yTran, and zTran all to zero (.000).
8. Open Window>Joint Editor.
9. Click the Zero Figure button. Close the Joint Editor window.
10. With the PDM Serf figure still selected, click Body Part>Right Forearm.
11. In the Parameter Dials window, click on the Properties tab.
12. Uncheck Visible.

13. Repeat steps 10 through 12 for the Left Forearm, Hip, Right Thigh, Right Shin, Left Thigh, and Left Shin.

14. Go to the MATERIAL room.

15. Click Object:>PDM Serf.

16. Click Material:>Tunic.

17. Change the Diffuse\_Color to civ-specific blue. (R 57, G 100, B 253)

18. Change the Specular\_Color to black.

19. Click Material:>Shirt.

20. Change the Diffuse\_Color to gray (e.g. R 135, G 135, B 135)

21. Go to the Pose room.

22. Save.

## Building the Model

### *Part 5, Another Conforming Figure*

With the previous two figures, we recolored them by selecting a *Difusse\_Color* in the MATERIAL room. This time, we'll create and apply a texture map.

1. Open UVMapper. I'll be using a mac version, but the Windows version should be pretty similar.
2. Open from your Poser folder *runtime\libraries\character\CivIII figures\Kilt 4.obj*.
3. Click File>Export Texture Map.
4. Save as *Kilt 4\_map.tif* in your *CivIII Creation\New Unit\Texture Maps* folder. That way you can find it for future uses.
5. Close UVMapper.
6. Open Photoshop (or another image editing program).
7. Open *Kilt 4\_map.tif*.
8. Edit the image to show a civ-specific blue (R 57, G 100, B 253) stripe that covers the top 25% or so of the kilt wireframe. The rest of the image should match the gray of the PDM Serf figure's shirt. (e.g. R 135, G 135, B 135)
9. Save the file as *CivIII Creation\Spanish Pike\Props\Spanish\_Kilt\_4\_Map.jpg*.
10. Return to Poser.
11. Open the Libraries window again.

12. Click Figures>Civill Figures
13. Click once on *Kilt 4*.
14. Click on the double checkmark button.
15. Make sure the Kilt figure is selected.
16. Click Figure>Conform To ...>PDM
17. Click Body Parts>Hip.
18. Set the xTran, yTran, and zTran all to zero (.000).
19. Go to the MATERIAL room. The next few steps may differ for Poser 4.
20. Select Object:>Kilt.
21. Select Material:>Tunic.
22. Click on the plug button next to Diffuse\_Color.
23. Click New Node>2D Textures>image\_map.
24. Click on None next to Image\_Source.
25. Click on Browse.
26. Select *Spanish\_Kilt\_4\_Map.jpg* and click OK.

27. Click Material:>TTrim.

28. Repeat steps 22 through 26.

29. Go to the POSE room.

30. Save.

## Building the Model

### *Part 6, Adding Props*

Generally, the clothing that your units will wear be conforming figures that move with your figure as it moves. Other things like weapons, helmets, etc. are usually props. In order to get props to move with your figure you need to parent them to a body part of the figure. I've noticed that when parenting a prop to legs and feet, the prop will move and need to be aligned a second time. Therefore, I try to avoid parenting to legs and feet. Here we'll add a smart prop from the Poser library which will automatically be parented to the proper body part, and two .3ds models that will need to be manually parented--most props are of this second variety.

1. Open the Libraries window again, and navigate to Props>CivIII Props.
2. Double-click on *Spear*. (The prop is a smart prop so it will come parented to the Right Hand of the PDM figure.)
3. Click File>Import>3D Studio ...
4. Select *CivIII Creation\Spanish Pike\Props\Hair\_and\_Helm.3ds*, and click OK.
5. Uncheck all of the Prop import options. The prop will import on the PDM's head.
6. Click Props>Hair\_and\_Helm.
7. Click Object>Change Parent ...
8. Follow the hierarchy until you find the head of the PDM figure; it won't be far down. Select head and click OK.
9. Repeat steps 3 through 7, but use *Spanish\_Shield.3ds* instead of *Hair\_and\_Helm.3ds*.

10. Follow the hierarchy until you find the Left Forearm of the PDM figure. Select Left Forearm and click OK.

11. Save.

At this point, you might want to alter this model to make it different than mine. Perhaps you want to change the clothing of the figure or the shield. I wouldn't change things too much though because problems during animating might arise. By altering the model, you will not be creating the same unit that I am, since I will be releasing this unit for download. Why not make a unit that you yourself want? Just keep in mind during the tutorial that your file names will be a little different because the name of your unit will be different.

## Animating

### *Part 1, Default*

The default animation is going to be--more likely than not--the easiest animation for you to create. It basically involves just coming up with a pose that you like and then moving a couple of body parts slightly during the course of the animation.

1. Select the PDM Figure.
2. Select the Right Foot and change the xTran to -.250.
3. Select the Left Foot and change the xTran to .250. The unit now, in my opinion, has a more powerful looking stance.
4. Select the Body and set the yRotate to -20. This just looks a little more dynamic than having the unit's shoulders square to the direction he's facing. This isn't necessary for all units, but I'll be doing it with this one.
5. Select the Left Foot again and the Side-Side value to 10. This will approximately point the foot at the camera, indicating that the unit is facing south.
6. Now select the Neck and set the Twist at 20. This will make the unit look south.
7. Now we'll need to adjust the Right Shoulder, Right Forearm, and Right Hand so that the spear's end is on the ground and the tip is pointing upwards. The spear is a little too long, but this won't be a problem at Civ-scale. Here are the values that I will change.

#### *Right Shoulder*

Front-Back: -15

Bend: 65

#### *Right Forearm*

Twist: -23

Side-Side: 10

Bend: 95

#### *Right Hand*

Side-Side: 13

8. We need to adjust the fingers on the right hand so that it appears that the model is holding the spear. Here are some values to enter.

*Right Finger 1*

Bend: 60

*Right Finger 2*

Bend: 45

*Right Index 1*

Bend: 60

*Right Index 2*

Bend: 45

9. Now we will do the same thing with the Left Shoulder and Left Forearm. Because the Left Hand is holding the shield, we will never move it. Here are the values that I have selected.

*Left Shoulder*

Front-Back: 15

Bend: -70

*Left Forearm*

Twist: 10

Side-Side: -15

Bend: -55

10. Save. This is the base pose for our unit, and we don't want to lose it, so we'll save just to be safe.

11. Open Window>Hierarchy Editor.

12. Check the box next to the Right Arm under the PDM figure. We will be moving parts of the unit later that will affect the positioning of the right arm. By turning on the IK chain for the right arm, we'll ensure that the Right Hand stays where it is. That way as the unit moves a little bit, the spear stays planted in the ground.

13. Close the Hierarchy window.

14. If they aren't already visible, turn on the Animation Controls by clicking Window>Animation Controls. You will see in the middle that it says Frame: 001 of 001.

15. Click on the right-most 001 and type in 15. Our default animation will have 15 frames.

16. Now select the Chest, and set the Twist to -1.5.

17. Now select the Neck and set the Twist to 15.

18. Now in the Animation Controls, click on the 001 and type 8.

19. Select Neck and change the Twist to 25.

20. Select the Chest and set the Twist to 1.5.

21. Click Animation>Loop Interpolation. This will cause your animation essentially to loop.

22. Now in the Animation Controls window click on the key icon. This opens up the Key Frame Editor. Because we don't want our default animation to change anymore, we need to make sure that all of the PDM's body parts have key frames in every frame.

23. The top line will say PDM, and to the right of that, there will be 15 squares representing each frame in the animation. In this row, select all 15 squares. You'll notice that you have selected all frames for all body parts and props.

24. Find the + sign and click it. This adds a key frame in every frame for every body part and prop selected--in this case all of them for the PDM.

25. With all of the frames still selected, click on the yellow button with the up-down-up line on it. It's unnecessary to explain what this does, but having it clicked makes animating a lot easier, in my opinion.

26. Because I know that we'll be adjusting this later, in the Key Frame Editor select all 15 squares to the right of Kilt.
27. Click on the + button.
28. Click on the yellow button again.
29. Close the Key Frame Editor.
30. Open Window>Hierarchy Editor.
31. Uncheck the box next to the Right Arm under the PDM figure.
32. Close the Hierarchy window.
33. Save. You've now designed a looping default animation.

## Animating

### *Part 2, Fortify*

Because the fortify animation is ten frames long, the easiest way to animate the unit is to split the animation into two five-frame sequences. Use one five-frame sequence for each leg. Generally, I use the first five frames to set the left leg and the last five frames to set the right leg. This strategy makes for simple fortify animations, so you may have to alter this strategy if you want to make a more complex fortify animation.

1. Click Animation>Loop Animation. You want to remove the check mark. We do not want the end of this animation to lead into the pose of frame one.
2. In the animation controls at the bottom, you'll see Frame: 015 of 015. Click on the second 015 and type 25. We'll create a ten-frame fortify animation.
3. Click on the first 015, and type 20. You will now be looking at frame 20.
4. Switch to the Left Camera view. Display>Camera View>From Left. You should learn the hot keys for the Main, Front, Left, Right, and Top cameras because those are the ones that will be regularly used.
5. Make sure that the PDM figure is selected.
6. Select Body Parts>Left Foot.
7. Select the Translate/Pull tool.
8. Move the cursor over the Document Window where the figure is seen. Move the cursor over various parts of the figure. You will see a white outline around the body part or prop that you're currently over or close to. You will also see a red outline around the Left Foot. If you click the mouse while any body part or prop is outlined in white, you will select/alter that body part or prop.

9. Be sure that there is no white outline.

10. Press and hold the left mouse button. Then drag the left foot forward a little bit--how much is up to you. It will look like the leg is stretched out too far, and the foot will not be flat on the floor. My x-, y-, and zTran values for the left foot are now

Left Foot

xTran: .495

yTran: .000

zTran: .675

11. Select Body Parts>Hip.

12. In the same way that you did the Left Foot, move the Hip forward a little bit to make it look like his weight is being put on the Left Foot. The Hip can also be lowered.

Hip

xTran: .125

yTran: -.100

zTran: .335

13. In the Animation Controls at the bottom of the screen, click on the play button. You will see that the Left Foot slides forward. We want him to step forward however.

14. Open the Key Frame Editor.

15. You will see PDM at the top of the list of figures, body parts, and props. In the PDM row, click in box 20. All of the body parts, and props associated with the PDM figure will be selected.

16. Click the + button. This will make a key frame for all parameters for all body parts and props. As a result, we can adjust the PDM figure between frames in frames 16 through 19 without changing the pose of the figure in frame 20.

17. Close the Key Frame Editor.

18. Select Body Parts>Left Foot.

19. Go to frame 17.

20. Raise the Left Foot up.  
Left Foot  
yTran: .200

21. Go to frame 18.

22. Set the yTran value to be the same as that in frame 17. Now the unit is stepping forward.  
Left Foot  
yTran: .200

23. Open the Key Frame Editor.

24. In the PDM row, select frames 16, 17, 18, and 19.

25. Click on the + button.

26. Close the Key Frame Editor. The first half of your fortify animation is now completed.

27. Save--just to be safe.

28. Go to frame 25.

29. Select Body Parts>Hip.

30. Move the Hip backwards and down. Again, how far depends on your final pose that you want your unit's fortify position to be.

Hip

xTran: .020

yTran: -.300

zTran: .045

31. Select Body Parts>Right Foot.

32. Move the Right Foot backwards.

Right Foot

xTran: -.365

yTran: .000

zTran: -.310

33. At this time, finish your final fortify pose. This will involve moving the figure's neck, arms, hip, legs, etc. You will probably need to use other camera views than just the Left Camera. Basically, when your unit fortifies in-game, this is how the unit will look. If you want to preview this pose follow the steps below and make adjustments as necessary.

Hip

Bend: 10

Abdomen

Twist: -10

Chest

Twist: -10

Neck

Twist: 35

Left Shoulder

Front-Back: -10

Right Shoulder

Front-Back: -30

Bend: 60

Right Forearm

Twist: 20

Side-Side: 10

Bend: 70

Right Hand

Twist: 0

Side-Side: 0

Bend: 0

Right Thigh

Twist: -30

Right Foot

Side-Side: -25

\*Steps for previewing the final fortify pose.

A. Go to the Main Camera view. Display>Camera View>Main Camera.

B. Go to frame 1.

C. Select Props>ROTATE BALL

D. Turn the ROTATE BALL on its y-axis 45 degrees. Important: Only adjust the ROTATE BALL in frame 1.

ROTATE BALL

yRotate: 45

E. Go to frame 25

F. Click Render>Render. Now you will see how your unit will look.

G. Now close the rendered image's window.

H. Go back to frame 1.

I. Reset the ROTATE BALL.

ROTATE BALL

yRotate: 0.

34. Now that you have a pose that you are happy with, open the Key Frame Editor.

35. In the PDM row, select the box for frame 25. All of the body parts and props associated with the PDM figure will be highlighted.

36. Click on the + button.

37. Close the Key Frame Editor. Your final fortify pose is now set.

38. Go to frame 22.

39. Select Body Parts>Right Foot.

40. Raise the Right Foot using the Translate/Pull tool.  
Right Foot  
yTran: .250

41. Go to frame 23.

42. Set the yTran of the Right Foot to the same value as in frame 22.  
Right Foot  
yTran: .250

43. Open the Key Frame Editor.

44. In the PDM row, select frames 21, 22, 23, and 24.

45. Click the + button.

46. Close the Key Frame Editor. The animation for the PDM figure is now complete. However, you will notice that the Kilt figure is not moving with the PDM figure.

47. Save--just to be safe.

48. Select the Kilt figure.

49. Select Body Parts>Hip

50. In the Parameter Dials window, you will see that the Hip has Morphs: Left Out, Right Out, Left Front, Right Front, Left Back, and Right Back.

51. Go to frame 16.

52. Adjust the Morph settings to prevent the PDM figure's legs from showing through the Kilt. I prefer to use the Left Camera, Right Camera, and Front Camera for this process.

Hip

Left Front: .300

Right Out: .100

53. Go to frame 17 and adjust the Morphs again.

Hip

Left Front: .400

54. Repeat for frames 18 through 25.

55. Open the Key Frame Editor.

56. In the Kilt row, select frames 16 through 25.

57. Click the + button.

58. Close the Key Frame Editor.

59. Save. The fortify animation is complete.

## Animating

### *Part 3, AttackA*

Of course, all units attack differently depending on which weapon the unit has. Therefore, this explanation won't always be directly applicable. However, there are a few things that I do normally do the same for all units. First of all, I generally use the first four or five frames to prepare for the attack. For example, if the unit has a sword, he might have a backswing or raise the sword above his head. Then, three frames later is where the blow will fall. I like to use only three frames for this so that the actual attack is faster than all of the other motions. Then in the fifteenth frame of the attack the unit will again be in the fortify pose; this ensures that the attack will loop properly.

1. We want a 15-frame AttackA animation, so increase the number of frames to 40.
2. Click Display>Camera View>From Left.
3. Go to frame 29. This frame will be where the unit is pulling the spear back, ready to then attack.
4. Select the PDM figure.
5. Select Body Parts>Hip.
6. Select the Translate/Pull tool.
7. Move the Hip down a little bit and back about over the right foot.  
Hip  
xTran: -.060  
yTran: -.455  
zTran: -.170
8. Adjust the Right Shoulder, Right Forearm, and Right Hand to make it like he's pulling the spear back in preparation to thrust it forward.

Right Shoulder  
Front-Back: -40  
Bend: 35  
Right Forearm  
Twist: 30  
Side-Side: 20  
Bend: 60  
Right Hand  
Twist: -10  
Side-Side: 15

9. Open the Key Frame Editor.

10. In the PDM row, select frame 29. All body parts and props for the PDM will be selected.

11. Click the + button.

12. Close the Key Frame Editor.

13. Go to frame 32.

14. This is where the spear will hit the opposing unit. In order to make it look like the unit is really thrusting the spear with force, we'll twist and bend various body parts, move the hips and right arm forward, and move the left foot forwards. Here are the settings that I will end up with.

Hip  
Twist: 20  
xTran: .210  
yTran: -.575  
zTran: .575  
Abdomen  
Twist: 0  
Bend: 10  
Chest  
Twist: 0  
Bend: 5  
Neck

Twist: 0  
Bend: -15  
Left Foot  
xTran: .670  
yTran: .000  
zTran: 1.155  
Right Shoulder  
Twist: -75  
Front-Back: 55  
Bend: 10  
Right Forearm  
Twist: 0  
Front-Back: 20  
Bend: 5  
Right Hand  
Twist: 20  
Side-Side: -60  
Bend: 0

15. Open the Key Frame Editor.
16. In the PDM row, click on frame 32. All of the body parts and props associated with the PDM figure will be highlighted.
17. Click on the + button.
18. Close the Key Frame Editor.
19. Save, just to be safe.
20. Go to frame 30.
21. Select Body Parts>Left Foot.
22. Raise the left foot a little bit, so that it appears that the unit is stepping forward and not sliding his foot forward.

Left Foot  
yTran: .150

23. Go to frame 31.

24. Set the Left Foot's yTran to the same value as in frame 30.  
Left Foot  
yTran: .150

25. Open the Key Frame Editor.

26. In the PDM row, select frames 26 through 32.

27. Click the + button.

28. In the PDM row, select frame 25.

29. Click Edit>Copy.

30. In the PDM row, select frame 40.

31. Click Edit>Paste.

32. At this point we want to prevent the Left Foot from sliding between frames 32 and 40. In the PDM figure's Left Foot row, select frame 32.

33. Click Edit>Copy.

34. In the PDM figure's Left Foot row, select frame 34.

35. Click Edit>Paste.

36. In the PDM figure's Left Foot row, select frame 40.

37. Click Edit>Copy.

38. In the PDM figure's Left Foot row, select frame 39.

39. Click Edit>Paste.

40. Close the Key Frame Editor.

41. Go to frame 36.

42. Select Body Parts>Left Foot.

43. Raise the yTran so that it appears the unit is stepping backwards, not sliding backwards.

```
Left Foot
    yTran: .100
```

44. Go to frame 37.

45. Set the yTran to be the same as in frame 36.

```
Left Foot
    yTran: .100
```

46. Open the Key Frame Editor; we'll make the unit hold the spear forward longer.

47. In the PDM figure's Right Shoulder's, Right Forearm's, and Right Hand's rows, select frame 32. You click and hold on frame 32 of the Right Shoulder and then move the cursor down over frame 32 of the Right Forearm and Right Hand. A white box will appear around the three body parts' 32 frames.

48. Click Edit>Copy.

49. In the PDM figure's Right Shoulder's, Right Forearm's, and Right Hand's rows, select frame 33.

50. Click Edit>Paste.

51. Go to frame 35.

52. Select Body Parts>Hip. We'll now add a little bounce to the unit.

53. Raise the yTran just a little bit.

Hip

yTran: -.440

54. Go to frame 38.

55. Lower the yTran of the Hip.

Hip

yTran: -.515

56. Open the Key Frame Editor

57. In the PDM row, select frames 33 through 39.

58. Click the + button.

59. Close the Key Frame Editor.

60. Save, just in case. You don't want to lose your animation.

61. Select the Kilt figure.
62. Select Body Parts>Hip
63. Go to frame 26 and adjust the morphs, like was done in the fortify animation.
64. Repeat for frames 27 through 39.
65. Open the Key Frame Editor.
66. In the Kilt row select frame 25.
67. Click Edit>Copy.
68. In the Kilt row, select frame 40.
69. Click Edit>Paste.
70. In the Kilt row, select frames 26 through 39.
71. Click the + button.
72. Close the Key Frame Editor.
73. Save.

## Animating

### *Part 4, Death*

Uuh . . . I don't like making death animations. I find them the most challenging to create, and you only make them for the unit to disappear! Oh well. There's definitely no one way to make them either. Basically, there are just a few things to decide. Does the unit drop anything? Spear? Shield? Where on his body does the fatal blow strike? Which way does the unit fall? As you can see, there are many possibilities. Because this is for a tutorial, I'll make a simple death animation. The unit will drop his spear, get hit in the stomach, and fall backwards. Easy enough.

1. Change the number of frames to 55.
2. Go to frame 45.
3. Select the PDM figure.
4. Select Props>Spear.
5. Click Object>Change Parent...
6. Follow the hierarchy until you find ROTATE BALL. Select ROTATE BALL and click OK.
7. Click Display>Camera View>From Left.
8. Select the Translate/Pull tool.
9. Lower the Spear to make it look it is falling to the ground. You'll also need to rotate it to make it land flat. Also, since you're in the Left Camera you'll see that the Spear falls on the Right Foot. Switch to Display>Camera View>From Front, and move the Spear to the left. I'll post my values below.

Spear

yRotate: -10  
xRotate: 0  
zRotate: 0  
xTran: -.330  
yTran: -2.150  
zTran: -.670

10. Open the Key Frame Editor
11. In the Spear row, select frames 41 through 45.
12. Click the + button.
13. Close the Key Frame Editor.
14. Go to frame 46.
15. Raise the Spear off of the ground. This will give the effect of the Spear bouncing when it hits the ground.  
Spear  
yTran: -2.050
16. Open the Key Frame Editor.
17. In the Spear row, select frame 46 and 47.
18. Click on the + button.
19. In the Spear row, select frame 45.
20. Click Edit>Copy.

21. In the Spear row, select frame 48.

22. Click Edit>Paste.

23. In the Spear row, select frames 49 through 55.

24. Click on the + button.

25. Close the Key Frame Editor.

26. Save, just in case.

27. Go to frame 45.

28. Select the PDM figure.

29. Here' will create a pose to make it look like the unit was struck in the stomach. He'll basically be doubled-over, sort of. To make it easier when he falls backwards, we'll get his hips and torso facing forward. Also, we'll bring the Right Foot up about even with the Left Foot.

Hip

Twist: 20  
Bend: 20  
xTran: .020  
yTran: -.430  
zTran: .045

Abdomen

Twist: 0  
Bend: 5

Chest

Twist: 0  
Bend: 10

Neck

Twist: 0  
Bend: 20

Right Shoulder

Front-Back: 10  
Right Forearm  
Side-Side: 45  
Bend: 80  
Right Foot  
Side-Side: -5  
xTran: .025  
yTran: .000  
zTran: .625

30. Open the Key Frame Editor.
31. In the PDM row, select frame 45.
32. Click the + button.
33. Close the Key Frame Editor.
34. Go to frame 42.
35. Select Body Parts>Right Foot.
36. Use the Translate/Pull tool to raise the foot, eliminating the sliding foot problem.  
Right Foot  
yTran: .150
37. Go to frame 43.
38. Set the yTran to match the value in frame 42.  
Right Foot  
yTran: .150
39. Open the Key Frame Editor.

40.. In the PDM row, select frames 41 to 44.

41. Click on the + button.

42. Close the Key Frame Editor.

43. Save, to be safe.

44. Go to frame 55.

45. Select Body Parts>Hip.

46. Since the body will be falling backwards, bend the hips back. Then move them where you want the unit to land. You will probably need to readjust the view of your camera to see the body when it's hitting the ground. Here are my hip settings.

Hip

Bend: -80  
xTran: -.480  
yTran: -2.700  
zTran: -1.325

47. Now complete the look of the dead body. Watch for body parts and props that fall through the ground plane. My settings are as follows.

Abdomen

Bend: 0

Chest

Bend: -15

Neck

Bend: -15

Right Shoulder

Front-Back: -40

Right Forearm

Side-Side: 30

Bend: 110

Left Shoulder

Twist: -100  
Front-Back: -15  
Bend: -30

48. Open the Key Frame Editor

49. In the PDM row, select frame 55.

50. Click the + button.

51. Close the Key Frame Editor.

52. Save to be on the safe side.

53. Go to frame 52.

54. Select Body Parts>Hip

55. Set the yTran of the hips to the same value as in frame 55. This is the first step in creating a bounce of the ground when the body hits.

Hip

yTran: -2.700

56. Go to frame 53.

57. Raise the hips of the ground to simulate the bounce.

Hip

yTran: -2.400

58. Go to frame 54.

59. Set the yTran of the hips to the same as frame 53.

Hip  
yTran: -2.400

60. Go to frame 52.

61. Create a pose for when the figure hits the ground. Normally, I have the abdomen, chest, and neck bent forward--you might want them to match frame 45. I also normally have the arms a little forward. Also since the hips are on the ground, body parts and props might pass through the floor.

Abdomen  
Bend: 5  
Chest:  
Bend: 10  
Neck  
Bend: 25  
Right Shoulder  
Front-Back: -10  
Right Forearm  
Bend: 115  
Left Shoulder  
Twist: -60  
Front-Back: -35

62. Open the Key Frame Editor.

63. In the PDM row, select frames 46 through 54.

64. Click the + button.

65. Close the Key Frame Editor.

66. Save again, for safety's sake.

67. Go to frame 41.

68. Select the Kilt figure.

69. Select Body Parts>Hip.

70. Adjust the morphs to prevent the legs from poking through the Kilt figure.

71. Repeat step 70 for frames 42 through 55.

72. Open the Key Frame Editor.

73. In the Kilt row, select frames 41 through 55.

74. Click the + button.

75. Close the Key Frame Editor.

76. Save.

## Animating

### *Part 5, Run*

The run is pretty easy to make. Basically, you just cut you animation down to 15 frames, apply one or two animations, and make a few alterations.

1. Save your file as *S Run.pz3*
2. Change the number of frames to 15.
3. A popup opens asking if you're sure that you want to do this. Click OK.
4. Select the PDM figure.
5. Select Props>Spear.
6. Click Object>Change Parent...
7. Follow the hierarchy until you find the Right Hand of the PDM figure. Select Right Hand and click OK. This must be done because during the death animation, we changed the spear's parent to ROTATE BALL to allow it to fall onto the ground.
8. Select Body.
9. Set the yRotate to 0, if it is not already. (For the tutorial, it should be at -20.)  
Body  
yRotate: 0
10. Open the Key Frame Editor
11. In the Body row for the PDM figure, select frames 2 through 15.

12. Click the - button. (It's next to the + button.)
13. Close the Key Frame Editor.
14. Click Window>Libraries
15. Navigate to Poses>CivIII Animations.
16. Click on Run.
17. Click on the checkmark at the bottom.
18. Go to frame 1.
19. Select the Kilt Figure.
20. Adjust the morphs.
21. Repeat step 20 for frames 2 through 15.
22. Go to frame 1.
23. Select the PDM figure.
24. If there are problems with body parts or props passing through each other, make necessary adjustments.
25. Repeat step 24 for frames 2 through 15. (Notice 14 and 15.)
26. Save.

## Rendering

### *Part 1, Run*

The first animation to be rendered is the run animation. Because the run animation is saved in its own separate poser file, there are a few steps that we can skip but will have to do with the others.

1. Open *S Run.pz3*
2. Select Props>ROTATE BALL.
3. Go to frame 1.
4. Click Display>Camera View>Main Camera.
5. Click Animation>Make Movie...
6. Use the following settings.
  - Movie: SRu
  - Sequence Type: Image Files
  - Resolution: Full (100 X 100)
  - Quality; Current Render Settings
7. Click OK.
8. Save as image type: BMP Windows (\*.bmp).
9. Save the files in the folder  
*Civill Creation>Spanish Pike>Animation Folders>Run>S.*
9. Click OK.

10. Wait for the rendering to finish.
11. Be sure that you're still in frame 1.
12. Change the yRotate of the ROTATE BALL to 45.
13. Click Animation>Make Movie...
14. Make sure the settings are the same as in step 6.
15. Save image type: BMP Windows (\*.bmp).
16. Save the files to the folder  
*Civill Creation>Spanish Pike>Animation Folders>Run>SE.*
17. Click OK.
18. Repeat steps 11 through 16. Use the following yRotate settings and save the files into the corresponding folders.
  - 90: E
  - 135: NE
  - 180: N
  - 135: NW
  - 90: W
  - 45 SW
19. Save.

## Rendering

### *Part 2, Other Animations.*

Now the rest of the animations will be rendered. The process will be just slightly different than for the run animation. Basically there are just a couple of extra steps because the four animations are in one poser file.

1. Open *S Base.pz3*.
2. Go to frame 1.
3. Select Props>ROTATE BALL.
4. Open the Key Frame Editor.
5. At the bottom, you will see *Play Range:*. There will be two arrows that can be moved to set which frames play in an animation. You can alter these while creating the individual animations. For example, when creating a looping attack animation, it might be useful to set the Play Range to only the frames used in the attack animation. Then, when you click the play button in the Animation Controls, you can see the animation play over and over.
6. Set the first arrow to frame 1.
7. Set the second arrow to frame 15--actually there are two arrows in the icon: one pointing left and one pointing right.
8. Close the Key Frame Editor.
9. Click Animation>Make Movie...
10. Use the following settings.  
Movie: SDe

Sequence Type: Image Files  
Resolution: Full (100 X 100)  
Quality; Current Render Settings

11. Click OK.

12. Save as image type: BMP Windows (\*.bmp).

13. Save the files in the folder  
*Civill Creation>Spanish Pike>Animation Folders>Default>S.*

9. Click OK.

10. Wait for the rendering to finish.

11. Render the other seven directions by changing the yRotate of the ROTATE BALL in frame 1 and the folder you will save the .bmp images into; only change values for the ROTATE BALL in frame 1, never in another frame.

45: SE  
90: E  
135: NE  
180: N  
-135: NW  
-90: W  
-45: SW

12. Open the Key Frame Editor.

13. In every row, select frames 16 through 55. You will have to do this by clicking-and-holding in frame 16 of the PDM row and dragging a box to the bottom, right-most square. For me it is frame 55 in the Shadow Cam Lit row.

14. Drag the highlighted frames to the left so that frame 16 becomes frame 1.

15. Because the fortify animation is only ten frames long, move the second arrow in the Play Range: to frame 10.

16. Close the Key frame Editor.

17. Go to frame 1.

18. Select Props>ROTATE BALL.

19. Click Animation>Make Movie...

20. Save the files as SFo

21. Render the images for all eight directions.

22. Open the Key Frame Editor.

23. Select everything in frames 11 through 55.

24. Drag the highlighted frames to the left so that frame 11 becomes frame 1.

25. Move the second arrow in the Play Range: to frame 15.

26. Close the Key Frame Editor.

27. Go to frame 1.

28. Select Props>ROTATE BALL.

29. Click Animation>Make Movie...

30. Save the files as Sat
31. Render the images for all eight directions.
32. Open the Key Frame Editor.
33. Select everything in frames 16 through 55.
34. Drag the highlighted frames to the left so that frame 16 becomes frame 1.
35. Leave the second arrow in the Play Range: at frame 15.
36. Close the Key Frame Editor.
37. Go to frame 1.
38. Select Props>ROTATE BALL.
39. Click Animation>Make Movie...
40. Save the files as SDi (This is short for SDie; the default animation is already using SDe)
41. Render the images for all eight directions.
42. Close Poser. DO NOT SAVE. If you save, you will lose your animations for the default, fortify, and attack animations.

## Steph's Storyboard Buidler

This is a quick run through of creating bitmap storyboards.

1. Open the Storyboard Builder.
2. Click Single Unit Storyboard Builder.
3. In the Picture information section, check the box next to First=1.
4. In the Main source folder (or background) section, click Browse...
5. Click  
*CivIII Creation>Spanish Pike>Animation Folders>AttackA>E>SAt\_0001.bmp*
5. Click Open.
6. Click Generate story board.
7. Repeat steps 2 through 6 for the other animations.
8. Click Exit.

## Creating the Palette

This is how to create the palette.

1. Download my Peleset Spearman unit, if you don't have it.  
[http://www.civfanatics.net/uploads9/Peleset\\_Spearman.zip](http://www.civfanatics.net/uploads9/Peleset_Spearman.zip)
2. Extract the files anywhere you'll be able to find them.
3. Open FLICster.
4. Click File>Open...
5. Select the Peleset Spearman's default animation: *PeDe.flc*.
6. Click Open
7. Click the Export tab.
8. Change the following settings.  
Base File Name: SPDe  
Output Directory: *CivIII Creation>Spanish Pike>Animation Folders>Default*
9. Click Export.
10. A window will open up asking, "Open new FXM File?" Click No.
11. Close FLICster.
12. Open pEdit

13. Click File>Open image.
14. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SDe\_.bmp*.
15. Click Open.
16. Click File>Open palette.
17. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SPDe.pal*.
18. Click Open.
19. Click in square n: 65. (Column 1, Row 5)
20. Click in the image to move colors into the palette.  
DO NOT DO THE FOLLOWING
  - Select any blues (civ-color)
  - Select any magentas (shadows and smoke)
  - Change the settings of the first 4 rows
  - Change the settings of the last 2 rows
21. When you think you've got all the colors needed in the palette, click Preview.
22. Select starting color: 1.
23. Click OK.
24. Select endingcolor color: 256.
25. Click OK.

26. The image will be shown with the new palette applied.
27. When you're done looking at the image, left-click will remove the palette.
28. If you want, continue editing the palette.
29. When you have a good palette, click File>Save palette.
30. Save as type: Jasc palette-file.
31. File name SP.pal
32. Select the folder *CivIII Creation>Spanish Pike>Animation Folders>Default*.
33. Click Save.
34. A window opens asking, "Do you wish to save only the first 16 colors?" Click No.
35. Close pEdit.

## Creating the .flc Files

This is how to create the .flc files that you will see in-game.

1. Open Paint Shop Pro 3.0.
2. Click File>Open.
3. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>sde~1.bmp*  
(Paint Shop Pro 3.0 is from the days when file names could only be 8 letters long. If you're using a newer version, the name will appear as something like *SDe\_.bmp*)
4. Click OK.
5. Click Colors>Load Palette...
6. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SP.pal*
7. Click OK.
8. Click Edit>Copy.
9. Click File>Close. (It doesn't matter if you save or not; it just depends on whether or not you want your .bmp storyboard to have the palette applied to it or not.)
10. Click File>Open...
11. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SPDe.pcx*
12. Click Colors>Load Palette.

13. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SP.pal*
14. Click OK
15. Click Edit>Paste>As New Selection.
16. Click File>Save.
17. Close Paint Shop Pro 3.0.
18. Open FLICster.
19. Click File>Open...
20. Select  
*CivIII Creation>Spanish Pike>Animation Folders>Default>SPDe\_Storyboard.FXM*
21. Click Open.
22. Click the Export tab.
23. Change the Output Directory setting, by clicking on the ... button.
24. Select the folder *CivIII Creation>Spanish Pike*
25. Click New Folder.
26. Name the folder what you want to name the unit. I'm choosing *Spanish Pike*.
27. Click OK

28. Click Export.
29. Close that window.
30. Click File>Open...
31. Select *CivIII Creation>Spanish Pike>Spanish Pike>SPDe.flc*
32. Click OK.
33. Click the Export tab.
34. Change the following settings.
  - Base File Name: SPAt
  - Output Directory: *CivIII Creation>Spanish Pike>Animation Folders>AttackA*
35. Click Export.
36. A window opens asking, "Open new FXM File?" Choose No.
37. Repeat steps 34 through 36 for the other animations: Death (SPDi), Fortify (SPFo), and Run (SPRu).
  - Special for the fortify animation
  - Frame Count>Change Frame Count:>10
38. Close FLICster.
39. Open Paint Shop Pro 3.0.
40. Click File>Open...

41. Select *CivIII Creation>Spanish Pike>Animation Folders>AttackA>Sat\_.bmp*
42. Click OK.
43. Click Colors>Load Palette...
44. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SP.pal*
45. Click OK
46. Click Edit>Copy.
47. Click File>Close. (Again, it doesn't matter if you save or not.)
48. Click File>Open...
49. Select *CivIII Creation>Spanish Pike>Animation Folders>AttackA>SPAt.pcx*
50. Click OK
51. Click Edit>Paste>As New Selection.
52. Click File>Save.
53. Click File>Close.
54. Repeat steps 40 through 53, for the death, fortify, and run animations.

55. Close Paint Shop Pro 3.0.

56. Open FLICster.

57. Click File>Open...

58. Select

*CivIII Creation>Spanish Pike>Animation Folders>AttackA>SPAt\_StoryBoard.FXM*

59. Click the View Animation tab.

60. Adjust the Frame Delay to your liking. (70)

61. Click the Export tab.

62. Change the following settings.

Frame Delay: Current Viewer Delay

Output Directory: *CivIII Creation>Spanish Pike>Spanish Pike*

63. Click Export.

64. Close that window.

65. Repeat steps 57 through 64 for the death, fortify and run animations. (For the run animation's frame delay, select 46.)

66. Close FLICster

## Creating the .ini File

Like with creating the palette, this is easiest to do by modifying an existing .ini. We'll use the Peleset Spearman's again.

1. Open Notepad, or another text editor.
2. Open *Peleset Spearman.INI* (I don't know where you put it on your computer.)
3. Change the following lines.  
    DEFAULT=SPDe.flc  
    RUN=SPRu.flc  
    ATTACK1=SPAt.flc  
    DEATH=SPDi.flc  
    FORTIFY=SPFo.flc
4. If you wish you may also link sounds to the various animations, I do not do that anymore.
5. Click File>Save As...
6. Select the folder *CivIII Creation>Spanish Pike>Spanish Pike*
7. File name: Spanish Pike.INI (The name must be the same as the name of the folder the file is in: "folder\_name.INI".)
8. Click Save.
9. Close Notepad.

## Other Images

Now we'll make the civiloPedia icons and the units\_32 picture.

1. Open *S Base.pz3* in Poser.
2. Click Display>Background Color...
3. Use the RGB values for white. (R 255, G 255, B 255)
4. Select Props>GROUND.
5. Go to the MATERIAL room.
6. Change the Diffuse\_Color to white.
7. Change the Specular\_Color, Ambient\_Color, and Refraction\_Color>Simple Color>Color to a gray. (R 135, G 135, B 135) These were all formerly a dark magenta color.
8. Return to the POSE room.
9. Click Render>Render Options...
10. Set the Image Output Settings' Width: and Height: to 128. This is the size of the large icon.
11. Select a frame with a pose that you like; it doesn't matter which.
12. Select Cameras>Aux Camera.

13. Adjust the camera to get just the right view. Again, this is your preference.
14. Click Render>Render.
15. Click File>Save As...
16. Name the file SPikeLarge.bmp  
Save As Image Type: BMP Windows (\*.bmp).
17. Save the file to the folder *CivIII Creation>Spanish Pike>Preview*.
18. Close Poser.
19. Open Photoshop 7.0. (The same things can be done in Paint Shop Pro; I just prefer Photoshop for them.)
20. Click File>Open...
21. Select *CivIII Creation>Spanish Pike>Preview>SpikeLarge.bmp*
22. Click Open.
23. Click File>Save As...
24. Select the folder *CivIII Creation>Spanish Pike>Spanish Pike*
25. Format: PCX (\*.PCX)
26. Click Save.

27. Click Image>Image Size...

28. Width: 32.

29. Height: 32.

30. Click OK.

31. Click File>Save As...

32. Select the folder *CivIII Creation>Spanish Pike>Spanish Pike*

33. File name: *SPikeSmall.pcx*

34. Click Save.

35. Close that window.

36. Click File>Open...

37. Select

*CivIII Creation>Spanish Pike>Animation Folders>Default>SE>SDe\_0001.bmp*

38. Click Open.

39. Select the Paintbrush tool.

40. Set the foreground color to magenta. (R 255, G 000, B 255)

41. Paint over the shadow on the ground.
42. Select the cropping tool.
43. Crop the image only vertically. The top will be the tip of the spear, and the bottom will be the bottom of the spear.
44. Click Image>Canvas Size...
45. Using pixels, set the Width: to match the Height:. (52)
46. Click OK.
47. Click Proceed.
48. Click Image>Image Size...
49. Width: 32.
50. Height: 32.
51. Select the paintbrush tool.
52. Set the foreground color to a red. (R 243, G 76, B 78)
53. Paint the civ-specific blue color red.
54. Click File>Save As...

55. Select the folder *CivIII Creation>Spanish Pike>Spanish Pike*
56. File name: *SPike\_32.pcx*
57. Format: PCX (\*.PCX)
58. Click Save.
59. Close Photoshop.
60. Open Paint Shop Pro 3.0.
61. Click File>Open...
62. Select *CivIII Creation>Spanish Pike>SPikeLarge.pcx*
63. Click Colors>Load Palette...
64. Select *CivIII Creation>Spanish Pike>Animation Folders>Default>SP.pal*
65. Click OK.
66. Click File>Save.
67. Click File>Close.
68. Repeat steps 61 through 67 for *SPikeSmall.pcx*
69. Close Paint Shop Pro 3.0.

## Creating Previews

### *Part 1, Non-animated*

If you want to upload your unit to Civfanatics, you will be asked for previews. Here's a what you can do.

1. Open Paint Shop Pro 3.0
2. Open a picture file that you like. (*SPikeLarge.pcx*)
3. Click File>Save As...
4. Select the folder *CivIII Creation>Spanish Pike>Preview*
5. File Name: *SPike\_First\_Preview*
6. List Files of Type: GIF - CompuServe
7. File Sub-Format: Version 89a - Interlaced
8. Click OK.
9. Upload *CivIII Creation>Spanish Pike>Preview>Spike\_First\_Preview.gif* to Civfanatics and place the image in a post in your thread--preferably the first post.

## Creating Previews

### *Part 2, Animated .gif's*

Here are the steps I go through if I want to make an animated preview.

1. Within the folder *CivIII Creation>Spanish Pike>Preview*, create a subfolder named *GIF*.
2. Open Paint Shop Pro 3.0.
3. Click File>Batch Conversion...
4. Input:>Directory: *CivIII Creation>Spanish Pike>Animation Folders>AttackA>SE*
5. Input:>File Names: (Select all of the files)
6. Output:>File Type: GIF - CompuServe
7. Output:>Sub-Type: Version 89a - Interlaced
8. Output:>Directory: *CivIII Creation>Spanish Pike>Preview>GIF*
9. Click OK.
10. A window will ask about decreasing the color depth; this happens for each image. Click Yes.
11. Click Close in the Batch Processing Status window.

12. Repeat steps 3 through 11. For the any other animations that you want in the preview. If you want the animations to flow into each other, make sure your images are in the SE direction. (I will do the death, default, and fortify.)

13. Close Paint Shop Pro 3.0.

14. Open unFREEz.

15. Open an Internet Explorer window showing the contents of the folder *Civill Creation>Spanish Pike>Preview>GIF*

16. Move the windows so that both are visible.

17. In the Explorer window select all images from the default animation.

18. Click-and-drag the files into the Frame (drop GIF files here) section of unFREEz. Be sure to click on the first file in the default animation--frame 1.

19. In the unFREEz window's Frame (drop GIF files here) section, scroll down to the bottom so there is an open line visible.

20. Go back to the Explorer window.

21. Click-and-drag the files over one more time. Click on the first file in the default animation and release the mouse button when the cursor is over the open line in the unFREEz window's Frames (drop GIF files here) section.

22. Go back to the Explorer window.

23. Select the files for the fortify animation.

24. Drag them over into unFREEz.

25. Repeat step 22 through 24 for the attack and death animations. I normally play the attack animation twice.

26. In unFREEz, set the Frame delay to 7 or 8. It depends on how fast you want to preview to run. It won't totally match the in-game speed.

27. Click Make Animated GIF.

28. Select the folder *CivIII Creation>Spanish Pike>Preview*

29. File name: *SPike\_Second\_Preview.gif*

30. Click Save.

31. Close unFREEz and the Explorer window.

32. Upload the file to Civfanatics and place the image in a post in your unit's thread--preferably the first post.

## Final Steps

The unit is now ready to be added to CivIII. But, if you want to share it with other players, here are a couple quick steps.

1. Zip the folder *CivIII Creation>Spanish Pike>Spanish Pike* into a .zip file named something like *Spanish\_Pike.zip*
2. Upload *Spanish\_Pike.zip* to Civfanatics.
3. Create a thread in the completed units forum and give everyone the link to your unit.