

Software: UVLayout

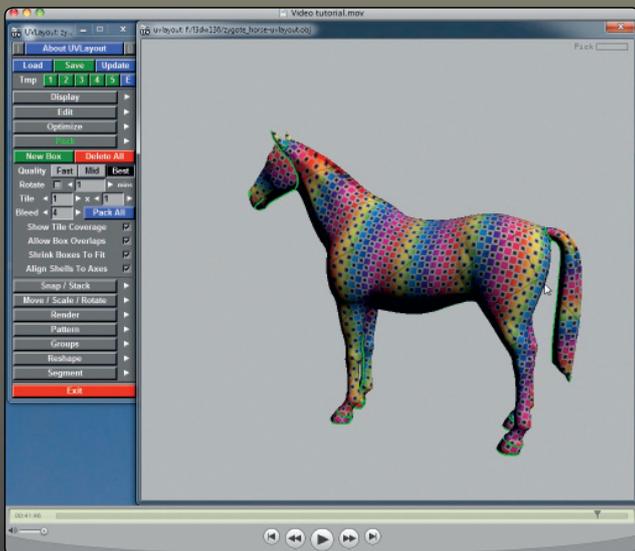
Map a horse in UVLayout

Follow this tutorial to map a quadruped from nose to tail

Includes
43 mins
of video
workflow

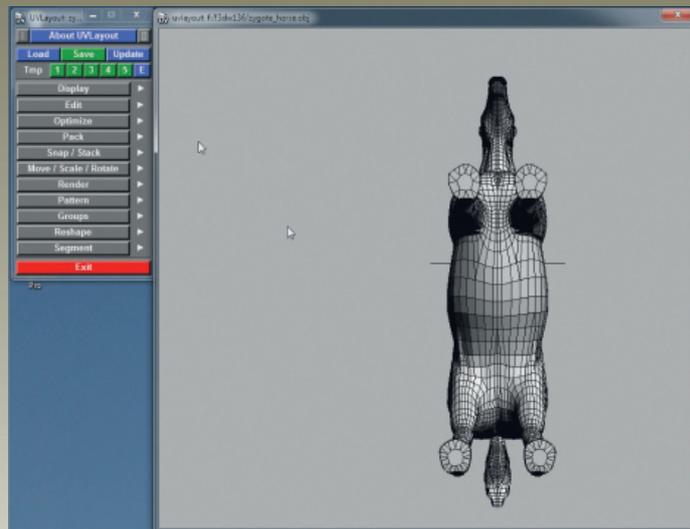
by Cirstyn Bech-Yagher

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VIDEO TUTORIAL

Download the video walkthrough accompanying this tutorial at 3dworldmag.com/137

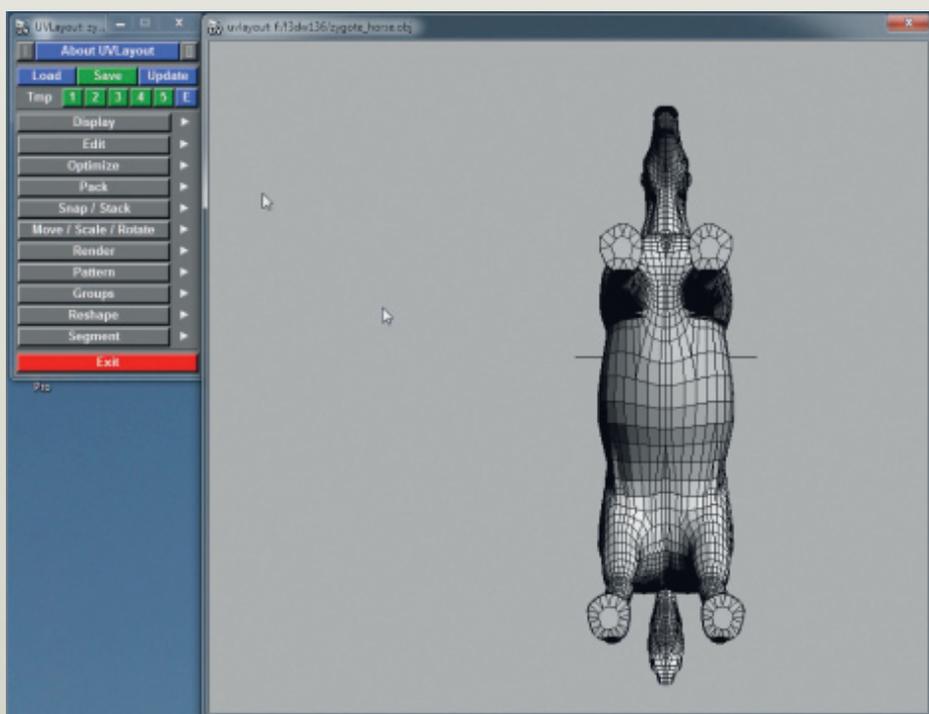


01 Getting started

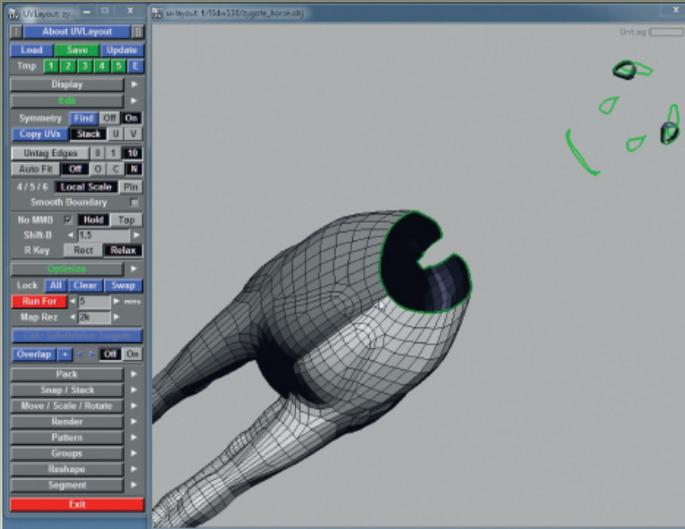
Open UVLayout (uvlayout.com) and click About UV layout > Preferences. Select Map and locate your UV grid. Click Load and locate your object, in this case a horse. Ensure in Load Options you set to Type to POLY and UVs are set to New. Click Groups, and in Material Groups hold [Ctrl] and select all groups except Hide. You'll see them turn green in the UI. Click anywhere outside the horse and press [H]. We're going to hide the bits we're not going to work with, so press [G] when you see the menu appear on the bottom of the screen. To unwrap the horse, you'll need to create seams. The way to do this, as easily as possible, is by using symmetry. Select Edit > FIND, then select an edge on the mid-point of the horse's underbelly by clicking it. Press [Space bar] to continue. Half the model turns dark grey. With Symmetry, you cut on one side and the cut is mirrored to the other side. When selecting seams, remember to use [Backspace] to erase edges you don't need. If it becomes a tangle click Edit > Untag Edges. Save often with Update instead of Save. To see how your mapping is progressing, press [3] to access the mapped view after you've flattened the map a little, and press [T] to cycle through the textures until you get your own UV grid.

02 Head and neck

We will now work on the horse's head. Select an edge under its cheek using [C] then select the loop around the head so it meets on top. Remember to also select the edges left open due to the hidden parts or they'll follow your shell. Select the mid-seam under the horse's head as well, and press [Enter] to cut the seam. Press [D] to drop it into the UV Editor, and [U] to enter the UV Editor. Select the head and press [Shift]+[F] to unwrap it. In the Optimise menu, set Run For to 5 mins, and click the red Run For button. Cut the neck next, following the same seam, ensuring your seams stay consistent. Drop it into the UV Editor and press [Shift]+[F]. Move it away from the mapped head using [Space bar] and clicking the middle mouse button.

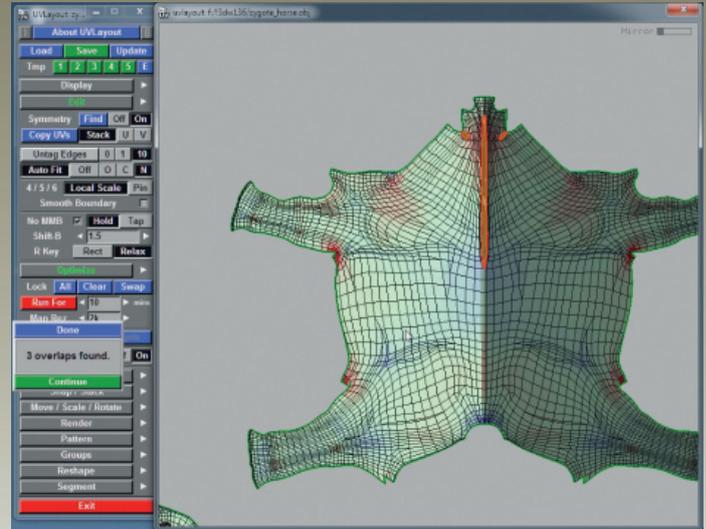


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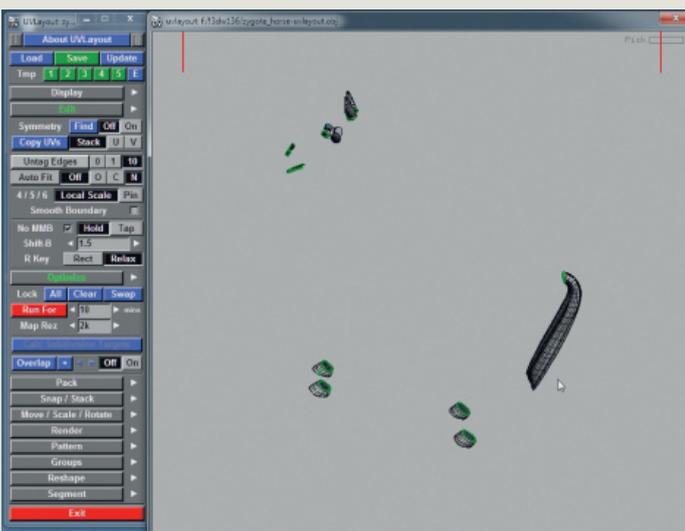
03 Torso and legs

Select the mid-seam on the underbelly. Follow it down and around the open edges of the tail. On the front and hind legs, mark the open edges and press [Enter] to detach the hooves and tail. Select the mid-seams on each leg, and cut the seam. To detach the legs from the torso, select a natural loop as high up as you can on the leg, mark the seam, and press [Enter]. Click the torso and drop it into the UV Editor [D]. Move it away from the head and neck by pressing [Space bar] and clicking the MMB. Unwrap and Optimise it with [Shift]+[F], then Run For. Go back to the Editor and press [D] to drop the hind legs into the Editor. Click the light grey leg, then unwrap and optimise it. When it's done, select the shell, press [S] and the other hind leg's shell will unwrap too. With the light grey hind leg still selected, move it next to the light side of the torso. Press [W] on its upper edge to select weld seams. Press [Enter] to weld, and [S]. Optimise and set Run For to 10 minutes. Press [Space bar] to stop when it's evened out. Repeat for the front legs.



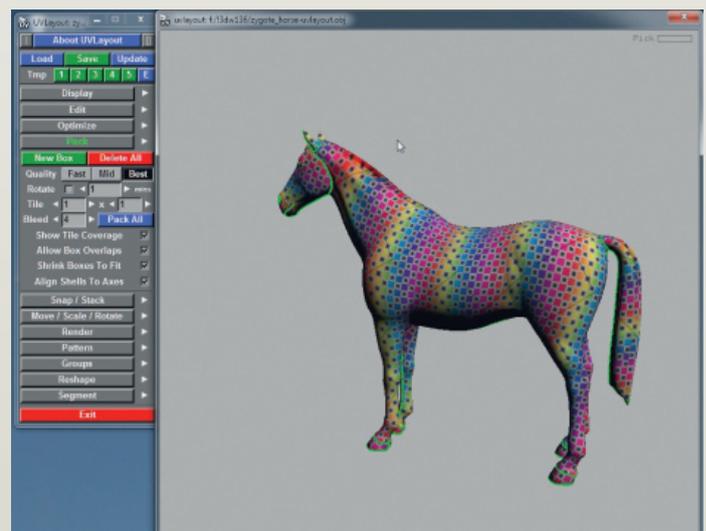
04 Overlaps

Click Edit > Overlap to check for any overlapping issues. You'll see you have a little in the area where the front leg meets at the stomach. Zoom in on the area, press [R] and the left mouse button to activate it. When you move the mouse, the faces will follow. Move the faces down and to the left. Press [S] on the light side of the mesh to mirror this to the other side. While still in the UV Editor, move the neck to the top of the unwrapped torso. Mark the seams, weld it in, and optimise. You may see it move around on the screen a lot, but it's just the mapper doing its job. You may have some remaining stretch or compression around the mane and some of the chest. This will need to be tweaked manually, so [Ctrl]-click to move the points. Press [S] on the light half again when you've finished.



05 Mapping and flicking

Press [E] to go back to the Editor, then [H], then [U]. Work through the remaining shells in the Material Group list, and select, drop, and unwrap all items. The hooves, tail and lashes will need a seam in the back to unwrap properly, so remember to cut them. When you've worked your way through everything, click Pack and set Quality to Best and Bleed to 4 then hit Pack All. As you can see, it's perfectly packed, but according to mathematics rather than the ease of texturing. Tweak by matching the horse's body to the head by rotating the head so it lines up using [Space bar] and clicking.



06 Finishing up

Continue tweaking by putting items next to their corresponding seams and shells. As we have a lot of space to move around in, we can put things next to each other instead of stacking or packing. The current scale on the map is even. If you want finer detailing, enlarge the relevant shells by pressing [Space bar] and right-clicking. Update the object and save your map via Render > Save, with AA Lines checked. ■