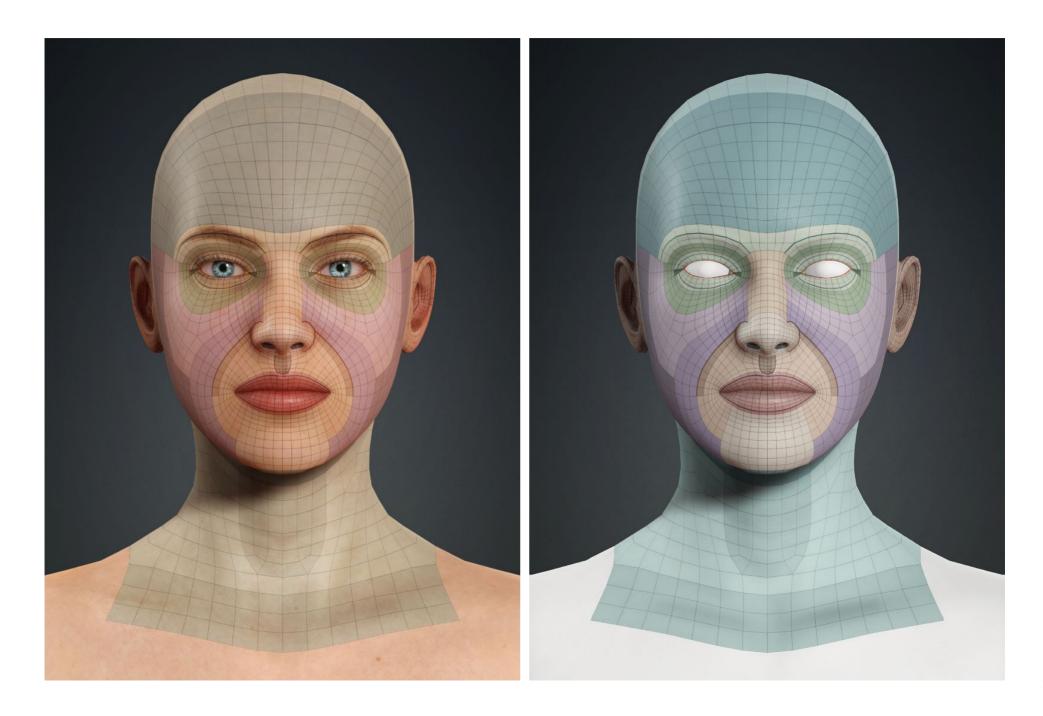


Model Optimization for the Best Facial Animation

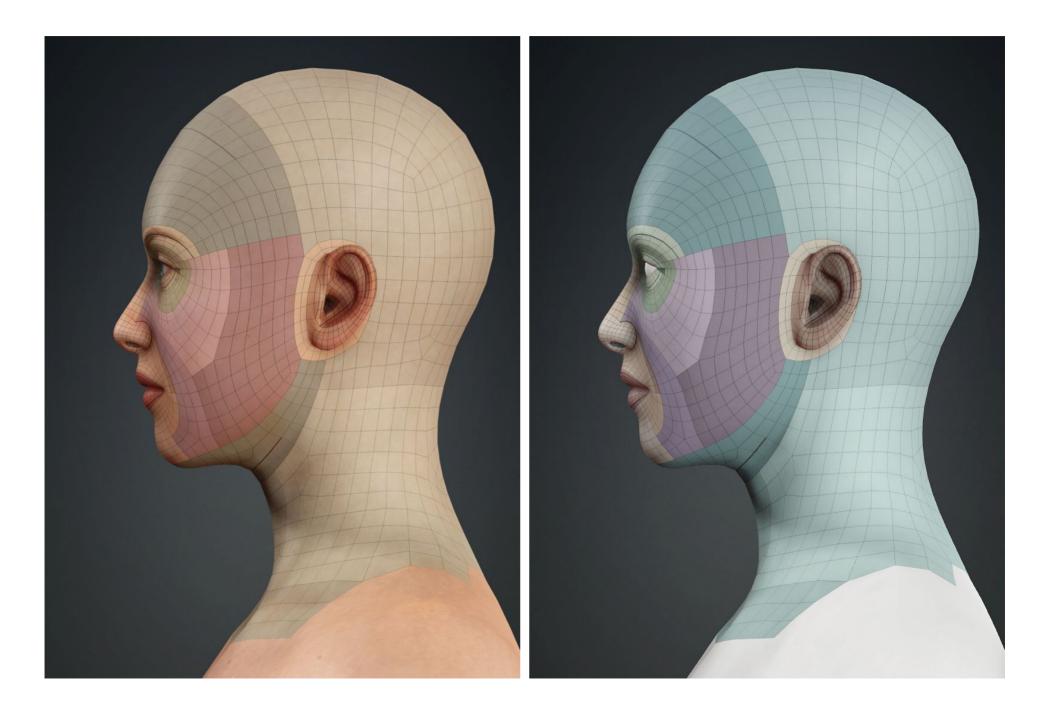
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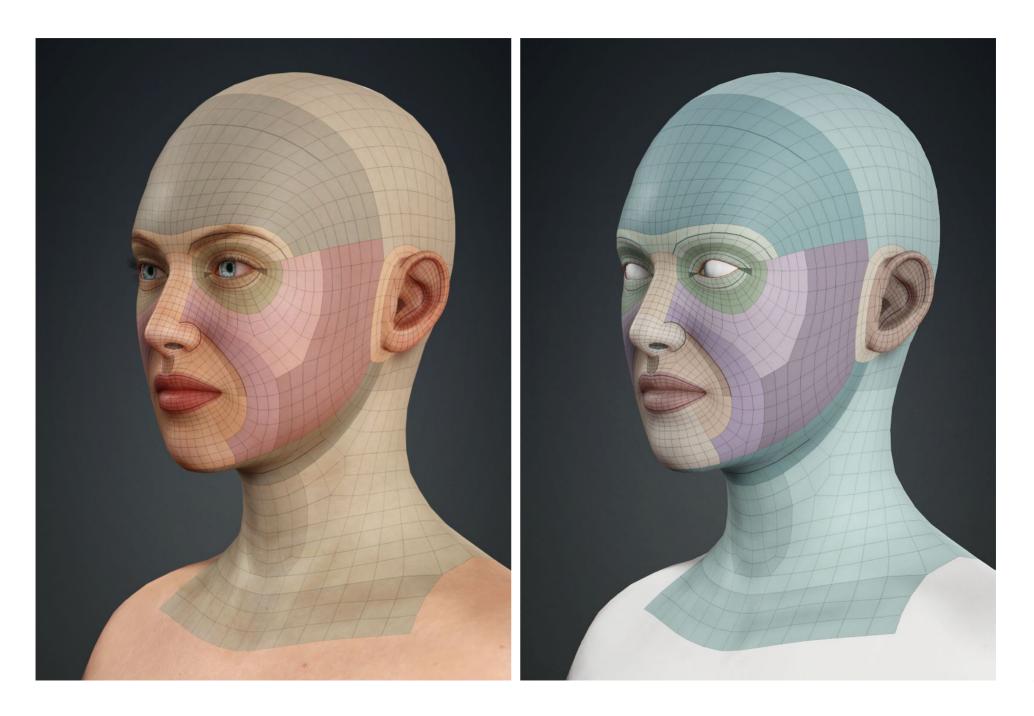
CC3+ Base (Default Topological Partitions - Front)



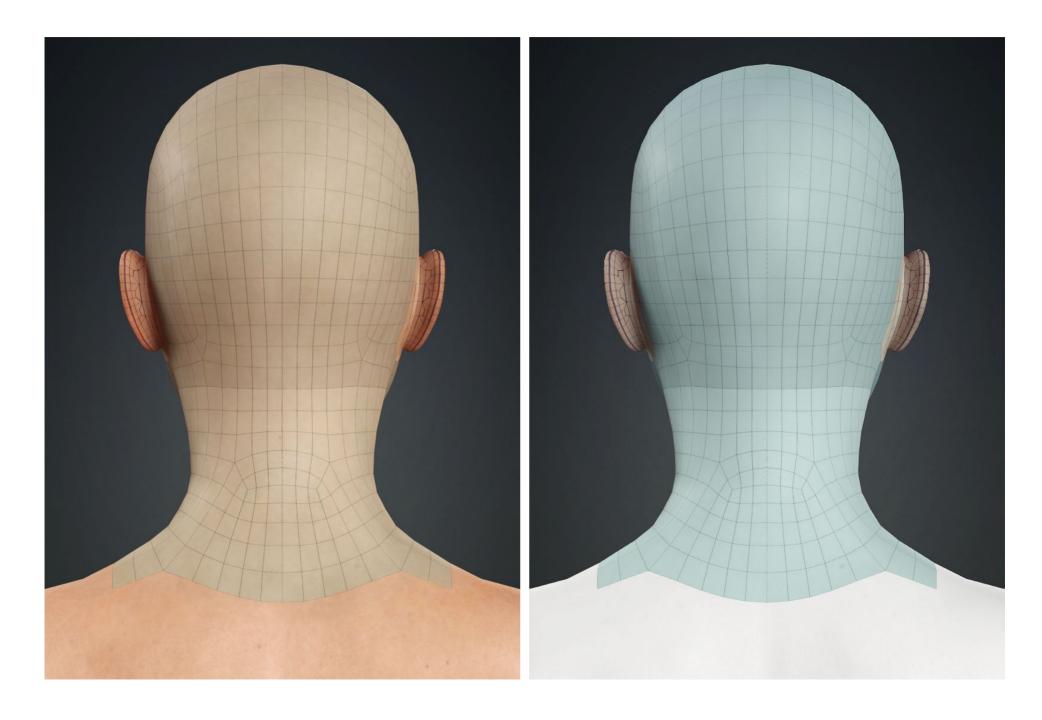
CC3+ Base (Default Topological Partitions - Side)



CC3+ Base (Default Topological Partitions - Quarter)

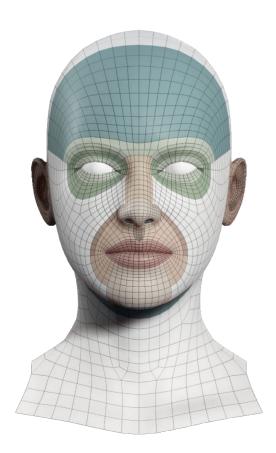


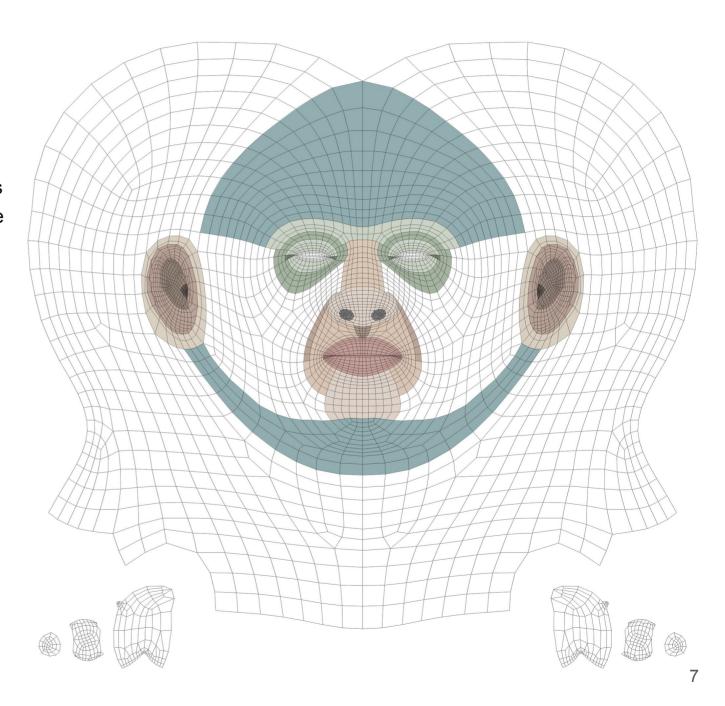
CC3+ Base (Default Topological Partitions - Back)



Primary Regions

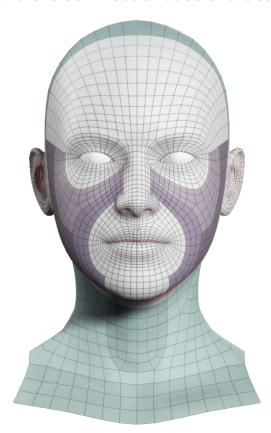
The integrity of topology in primary regions has a significant impact on the character model. These regions are specified on Page 11, and the edge flows within them must be kept aligned with the CC3+ neutral base character.

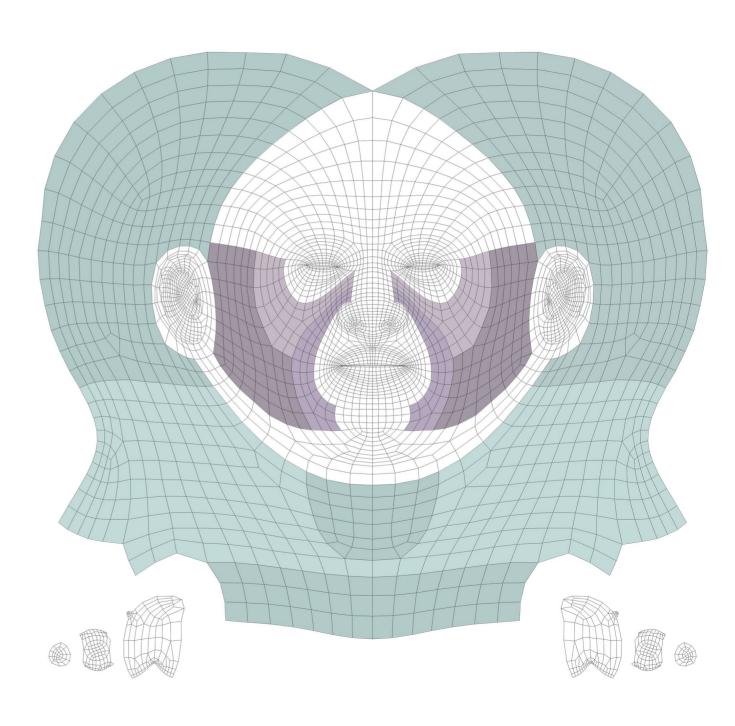




Secondary Regions

The topology in secondary regions has a lesser impact on the character model. It is important to ensure that these regions are correctly positioned, the topology is reasonably distributed, and the edge flows loosely resemble those of the CC3+ neutral base character.



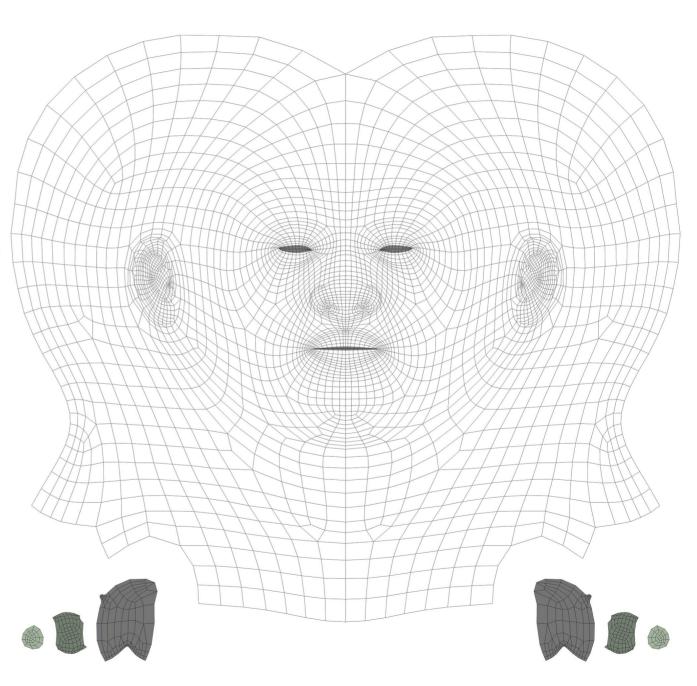


Tertiary Regions

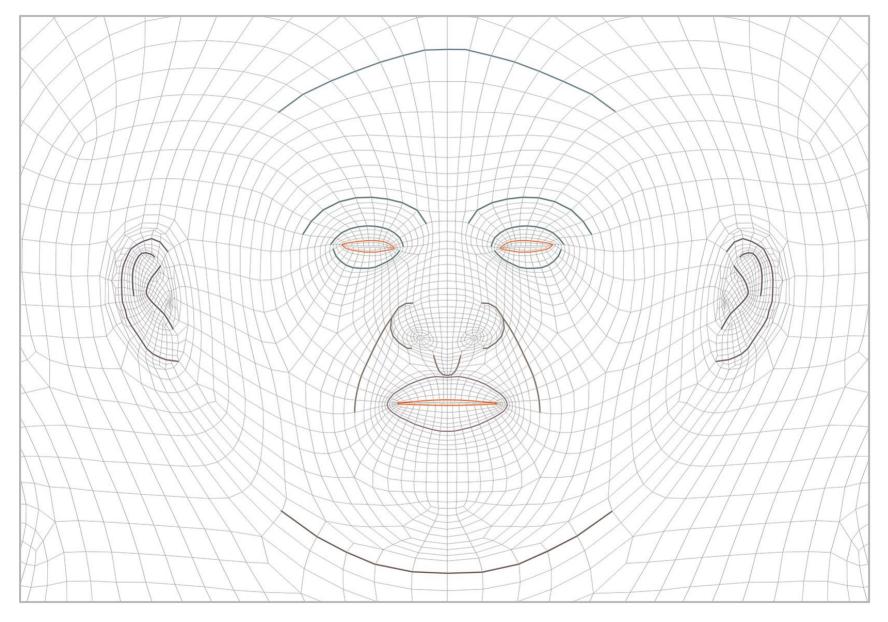
The lacrimal sacs, oral cavity, eye sockets, and similar areas have minimal impact on the character model. Adjust these regions based on the visual characteristics of the character.

Note: The facial features mentioned above are not editable in Headshot 2.





Key Regions - Line Segments



Essential edge loops that must be accurately positioned for the face to exhibit proper morphs and expressions.

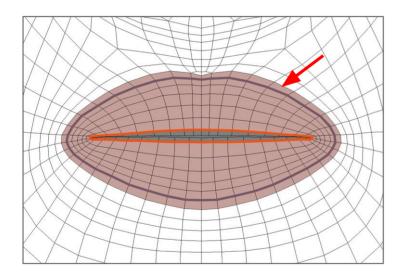
Connected edges of the eye sockets and the borders of the oral cavity.

Edge Flow for Individual Regions

•	Mouth Area	
	o Lip Contour	
	o Lip Corners	
	o Oral Cavity	
•	The Nose	
•	Nasolabial Folds	
•	Eye Areas	
	o Eye Sockets <u>P.17</u>	
	o Tear Troughs	
	o Double Eyelids <u>P.19</u>	
•	The EyebrowsP.20	
•	The Forehead	
•	The Ears	~23
•	Lower JawP.24	
•	Wrinkle-Related Areas <u>P.25</u>	

Mouth Area - Lip Contour

The arrow below indicates a brown line marking the border between the lips and the surrounding skin. It is important for this line to align closely with the edges of the lips, while avoiding any extension of the lip textures beyond the colored regions.

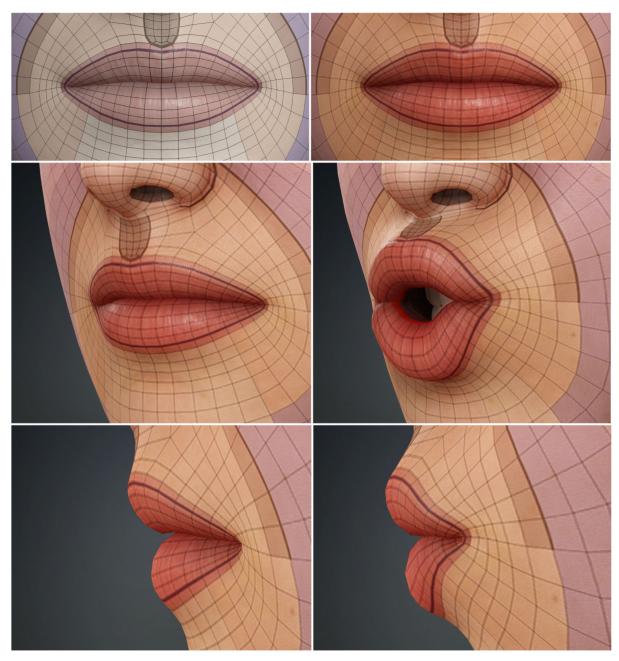


Level of influence:

Morph sliders: $\star \star \star \star \star$

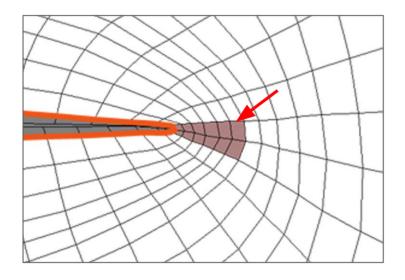
Facial expressions:★★★★

Facial wrinkles:★★★



Mouth Area - Lip Corners

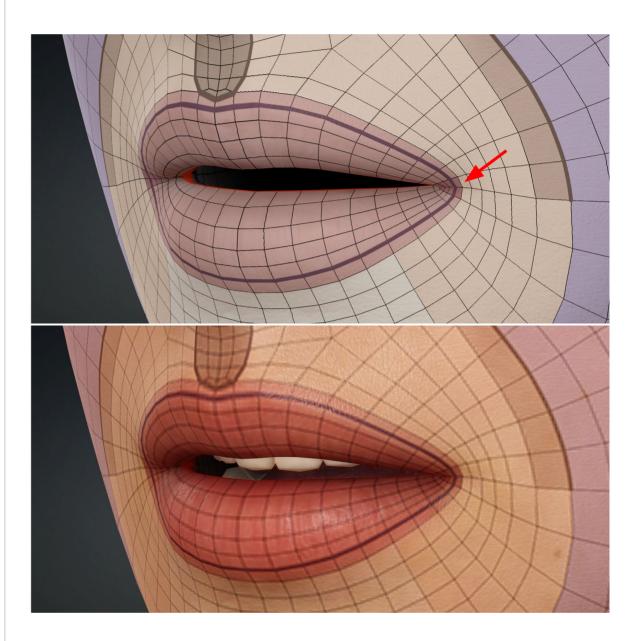
The arrow below indicates a highlighted triangular region at the corner of the lips. It is crucial for this area to align precisely with the actual mouth corners of the character.



Level of influence:

Morph sliders:★★★★ Facial expressions:★★★★

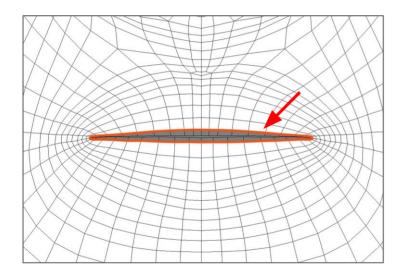
Facial wrinkles: ★ ★



Mouth Area - Oral Cavity

The arrow below points to the border junction between the lips and the oral cavity.

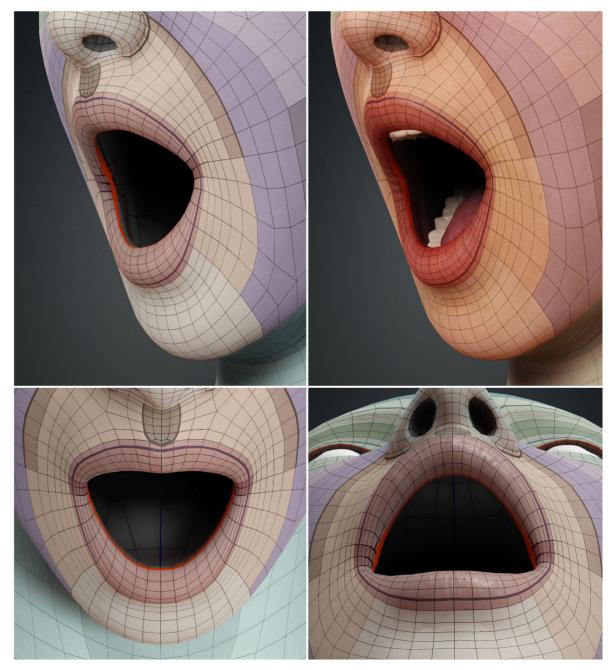
Note: You'll need to disable **Keep Borders** in Headshot 2 in order to modify these edges.



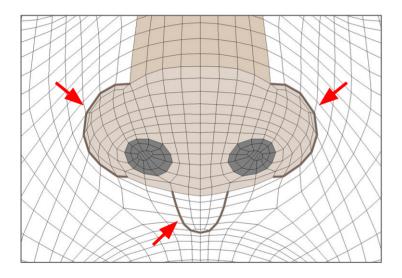
Level of influence:

Morph sliders:★★★★ Facial expressions:★★★★

Facial wrinkles:★

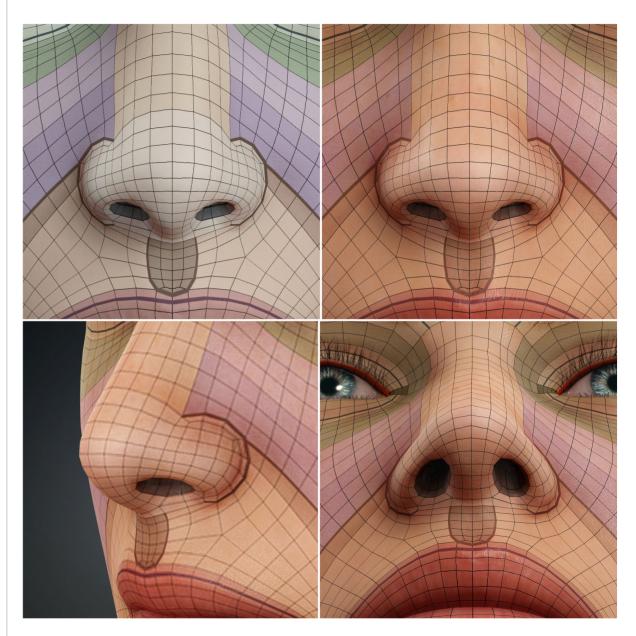


The arrows below point toward the two alar creases around the nasal wings and the philtrum indentation line underneath the nostrils.



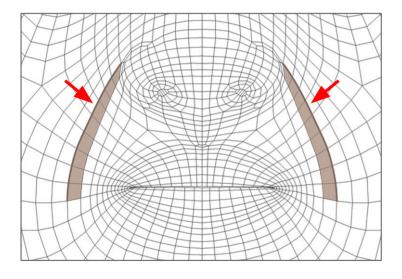
Level of influence:

Morph sliders:★★★★
Facial expressions:★★
Facial wrinkles:★★



Nasolabial Folds

The arrows below indicate the nasolabial folds with the colored areas marking the buffer zones for their placement. Attempt to keep the nasolabial folds within these colored regions.



Level of influence:

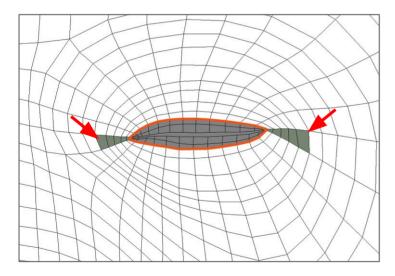
Morph sliders:★★★★
Facial expressions:★★★
Facial wrinkles:★★★



Eye Area - Eye Sockets

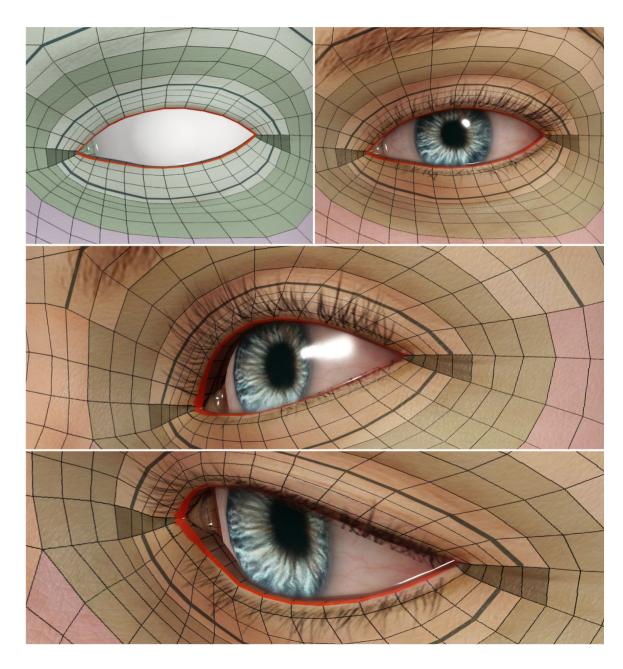
The orange lines below mark the border junction for eyelids with the regions in grey as the inner flesh of the eye socket. The arrows below mark the triangular regions of the eyes that form the corners of the eye.

Note: You'll need to disable **Keep Borders** in Headshot 2 in order to modify the edges of the eyes.



Level of influence:

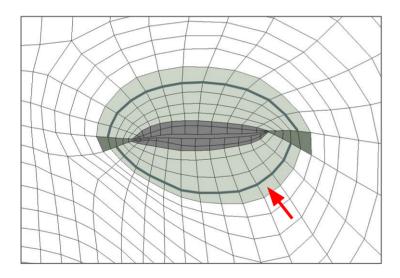
Morph sliders:★★★★ Facial expressions:★★★★ Facial wrinkles:★★★



Eye Area - Tear Trough

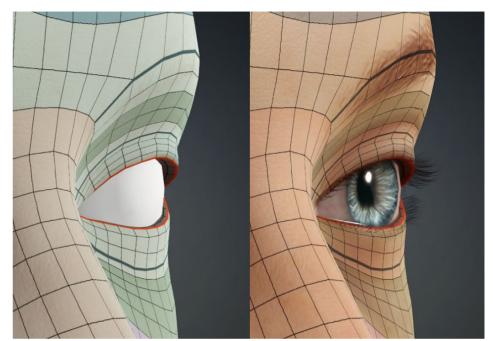
The arrow below points at the lowest part of the eyes, the tear trough. The light green areas are the buffer regions where the trough should lie.

Note: If the character has really large under-eye bags, then the tear trough can extend beyond the buffer area.



Level of influence:

Morph sliders:★★★★
Facial expressions:★★
Facial wrinkles:★★

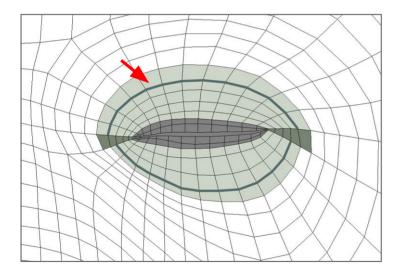




The Eyes - Double Eyelids

The arrow below indicates the double eyelid line within the green areas, which mark the buffer zones. When making adjustments, ensure that the double eyelid is positioned above the green line to avoid texture stretching when the eyes are closed.

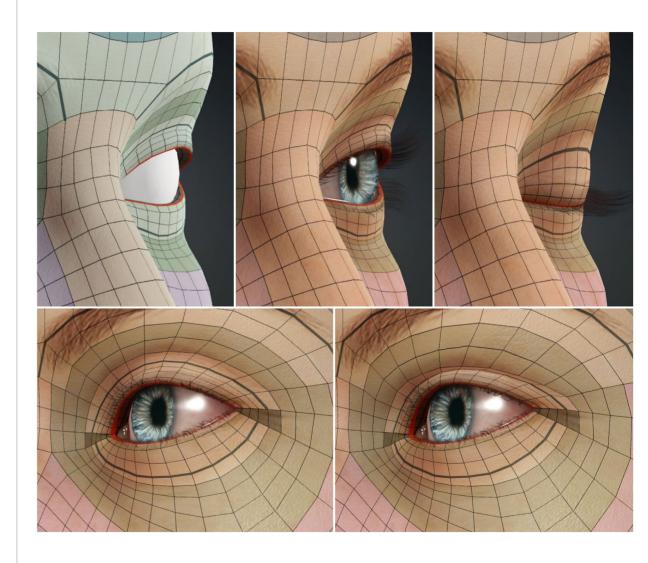
Note: If the character has monolids then just make sure that the eyelid topology is even.



Level of influence:

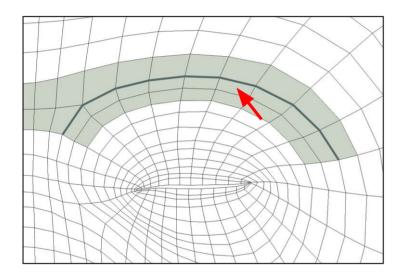
Morph sliders:★★★★
Facial expressions:★★★

Facial wrinkles:★★



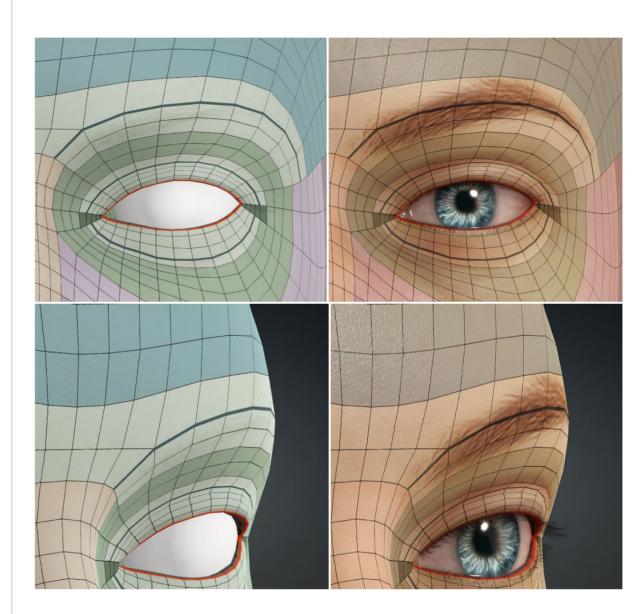
The Eyebrows

The arrow below points to the midline of the eyebrows. Incidentally, this is also the highest region of the orbits. Try not to have the brow lines extend beyond surrounding green buffer regions.



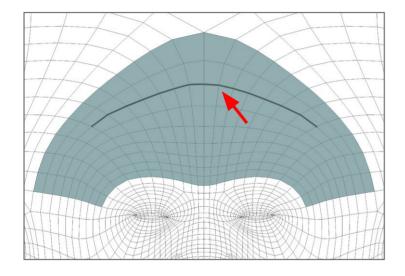
Level of influence:

Morph sliders:★★★★ Facial expressions:★★★★ Facial wrinkles:★★★★



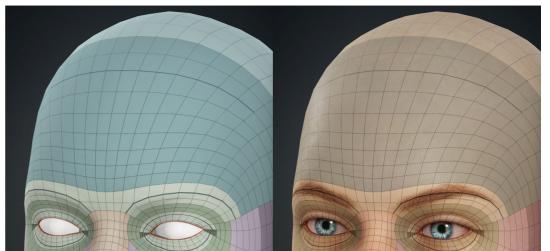
The Forehead

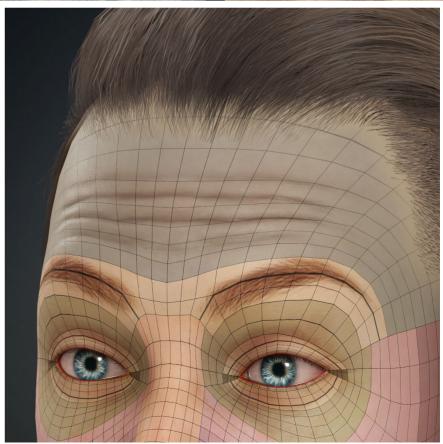
The arrow below indicates the forehead line, which aligns with the hairline. Please ensure that the topology under this line is evenly distributed.



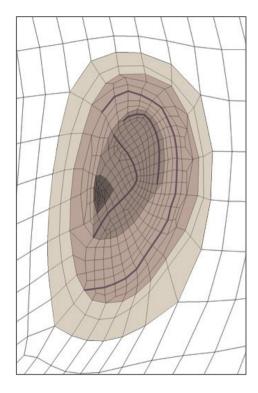
Level of influence:

Morph sliders:★★★
Facial expressions:★★
Facial wrinkles:★★★★



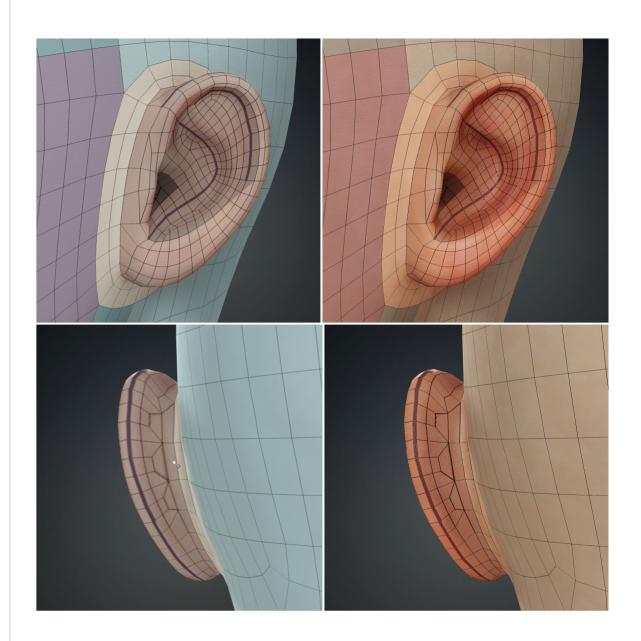


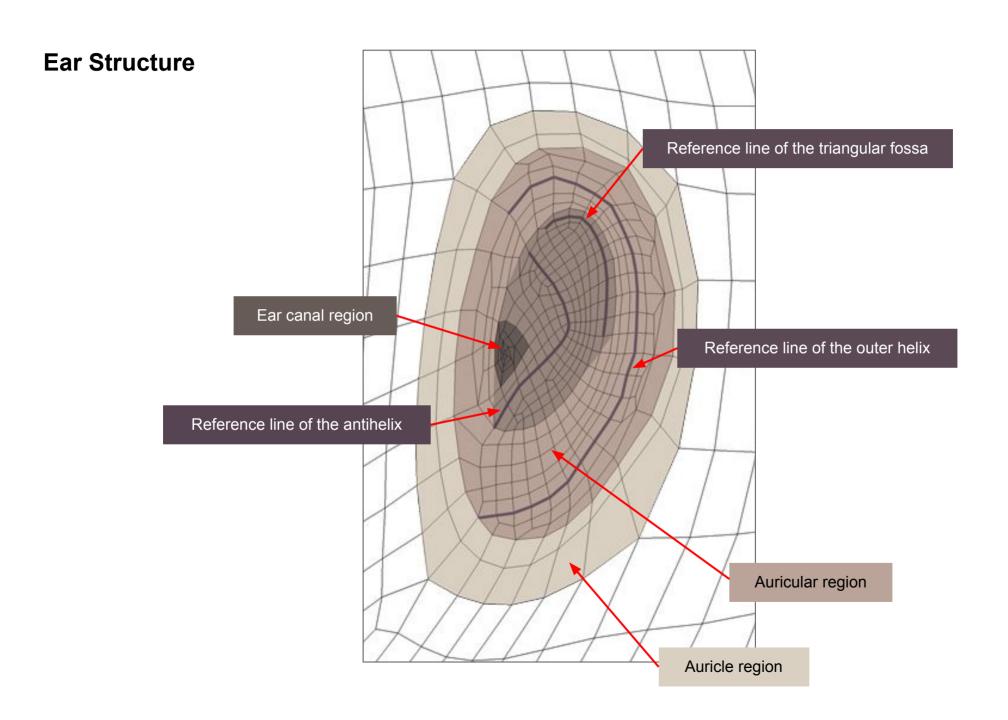
Please reference the image below for the placement of the guide loops. For more complex ear shapes, adjust the topology according to the situation.



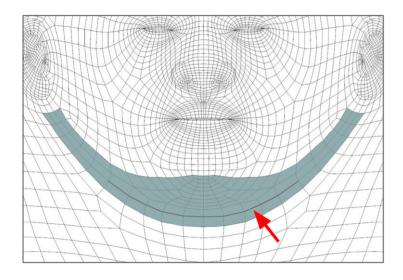
Level of influence:

Morph sliders:★★★★ Facial expressions: none Facial wrinkles: none



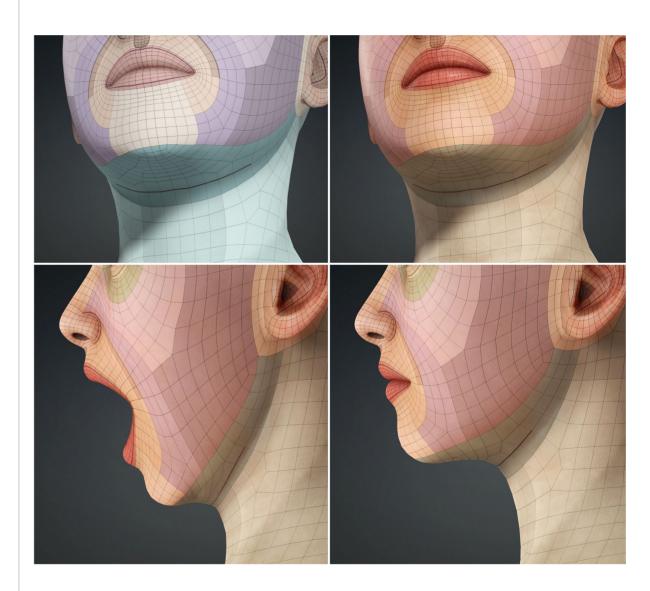


The blue region below represents the contour of the chin and the jawline. The arrow below indicates the point where the lower jaw meets the front of the neck, forming a bent junction.



Level of influence:

Morph sliders: ★★★★
Facial expressions: ★★★
Facial wrinkles: ★★★



The diagram labeled "A" on the right is a representation of all the wrinkle regions combined, covering most of the face and the front of the neck. In addition to the aforementioned key areas, it is important to maintain even distribution of topology throughout the overall structure of the head, closely resembling that of the default CC3+ neutral base character. This will ensure optimal performance of wrinkles when animations and expressions are applied.

