Building a 360 degrees Multi-View model target

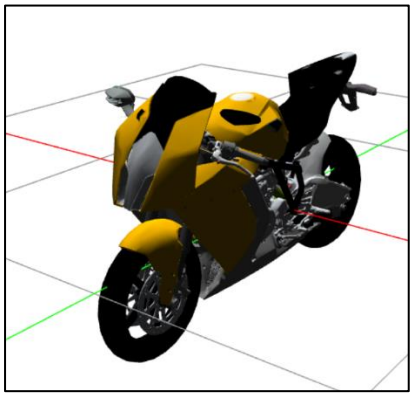
For general instructions on how to use the MTar Model View Generator, please refer to the reference guide document.

View splitting

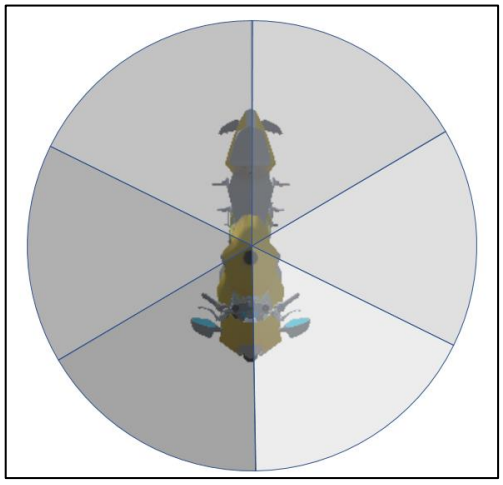
For the use case of viewing the model from various points within the full 360-degree range, it is recommended that you slice the view into a set of adjacent viewing ranges.

A good rule of thumb to follow is to split the views into 6 equal 60-degree slices for Vuforia to detect and track. This will provide an even distribution of viewing angles from all sides of the model.

For example, consider the case of a toy bike, pictured below:



If you imagine looking at the bike from a top view, the 360-degree viewing range around the model can be split into 6 slices of 60 degrees, as depicted below:

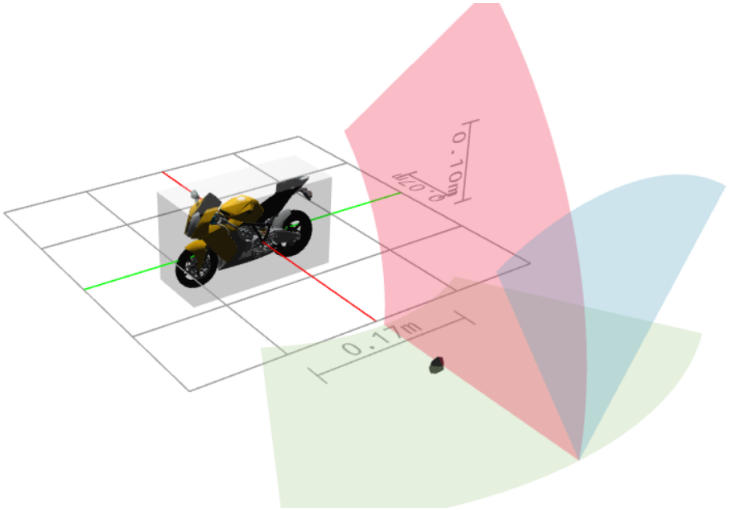


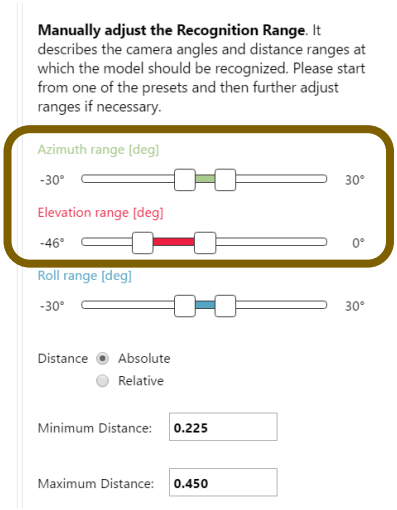
This sort of split will define 6 detection views in the MVG, such as the ones represented below:

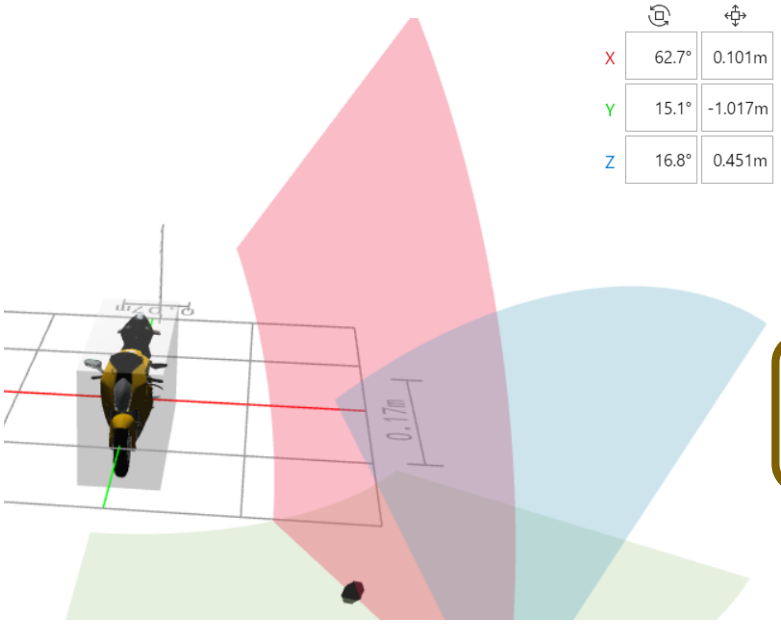
For each detection view, a viewing range will need to be defined using the Advanced Settings panel of the MVG.

In the example above, we define the azimuth angle to span the [-30, +30] degree range in order to cover a 60-degree angle symmetrically split around the reference line of sight.

Additionally, we set an elevation range of [-45, 0] degrees to also allow recognition when the model is seen slightly from above.







X	62.7°	0.101m
Y	15.1°	-1.017m
Z	16.8°	0.451m

Table Top Object

Panel

Advanced

Target Recognition Range

Manually adjust the Recognition Range. It describes the camera angles and distance ranges at which the model should be recognized. Please start from one of the presets and then further adjust ranges if necessary.

Azimuth range [deg]

-30° 30°

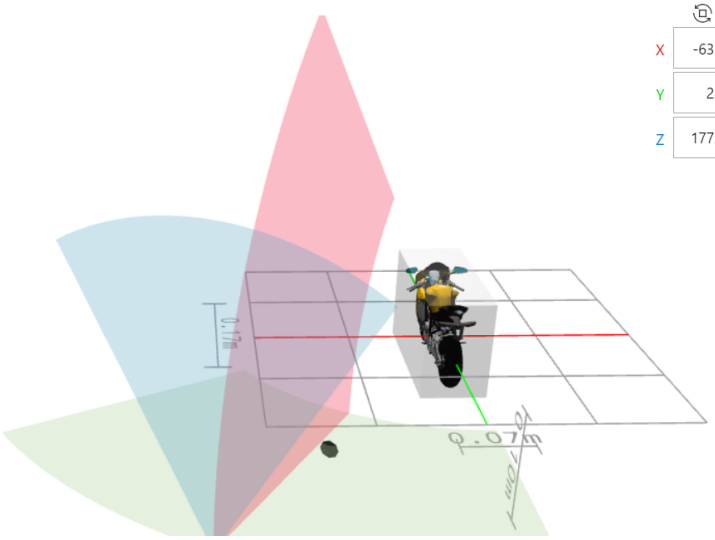
Elevation range [deg]

-45° 0°

Roll range [deg]

-30° 30°

Distance Absolute



X	-63.6°	0.266m
Y	2.3°	1.078m
Z	177.4°	0.472m

Table Top Object

Panel

Advanced

Target Recognition Range

Manually adjust the Recognition Range. It describes the camera angles and distance ranges at which the model should be recognized. Please start from one of the presets and then further adjust ranges if necessary.

Azimuth range [deg]

-30° 30°

Elevation range [deg]

-46° 0°

-30° 30°

Distance Absolute