

## nuSIM: Getting Started

## DYNAMIC INTERACTIVE 3D VISUALIZATION

nuSIM is a Plug In for 3D Advanced Mapping Visualization that greatly improves visualization capabilities of Physical Security solutions such as PSIM, VMS and Video Management solutions becoming integral part of them.

nuSIM integrates into PSIM solutions by means of interacting through API's all features and controls that are available for the former solution so nuSIM receives all instructions directly from application and does not have any particular control or similar in order to create a single unique solution. Once integrated, solution looks as follows:



In general, nuSIM interface looks like following picture where specific controls exist in order to interact with external devices.





## Description:

- 1) **Menu Open**. Here user selects an already existing 3D Model in order to loaded to screen. Options are OBJ or MLT file types.
- 2) **Select**. It is used to select an object or element inside 3D Model. It allows to stop video for streaming when a different camera is selected. This function avoids over usage of resources.
- 3) View from Camera. Selecting a camera and the using this option allows video streaming to start. Selecting "+" sign by camera allows to specify URL or ID as well as Login Credentials in order to have access to video feed.
- 4) **Create Camera**. With this option a new camera can be created on the specific position where cursor is selected. Doesn't matter capabilities of end camera. Once created it is being added to camera list at the right of the screen.
- 5) **Move Camera**. Use this control to change location of camera inside 3D Model. This allows to validate specific camera position.
- 6) **Rotate Camera**. This helps to change pan and tilt positions of camera for fine tuning and get best image coverage.
- 7) **Rotate Stand**. If stand is included as part of solution, then stand can be manipulated having camera on standing location.
- 8) **Move Object**. 3D model is a collection of objects, using this control allows to manipulate objects inside whole model for visualization reasons.
- 9) **Draw Wire**. With this control wiring paths can be drawn over 3D Model so more documentation can be included into the model. This does not modify 3D Model.
- 10) Erase Wire. Erases all of the above.
- 11) **Layers Dial**. This control allows to show / visual erase part of the 3D model. When on the top of screen whole model is shown, sliding it to the bottom of the screen vanishes roof, walls, etc to get to lowest level detail of the 3D model.
- 12) **Coordinates**. Since the whole 3D model is a conjunction of objects, it is possible to identify specific internal coordinates for the model so everything inside it has a unique location identifier and as such all security devices can be visually located.
- 13) Camera List. All cameras defined inside the system will be listed here so they are available for selection.