

Simplify components/layout for animation (VCAX) exporting

Prototype simplification command simplifies components automatically using pre-set values to optimize results for different use cases.

Result of simplification is used at VCAX animation export to use lighter models for faster animation rendering.

Simplification allows user to “reset” result and try different predefined values as simplification is only applied to component visualization. This also means that currently this result is not saved if component or layout is saved.

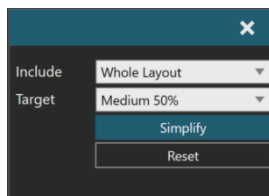
Installation

Copy provided python command folder to users “My Commands” folder (typically located at following path: C:\Users\USER\Documents\Visual Components\4.3\My Commands\)

Usage

Start application and load layout/component which would need simplification for animation.

Simplification tool can be started from home tab ribbon menu group “Cleanup” and using “Simplify” button. This command opens following command panel.



Simplification can be done either for selected components or for the whole layout. When simplifying large layout it is recommended to test first right simplification level with selected component(s) and only after this step process whole layout. Remember to reset tested component visualization before processing whole layout (large layout processing may take significant time as tool has not been optimized yet).

Before doing simplification choose right level from “Target” property mode. Simplification levels has following pre-sets:

Mode	Result percentage	Description
Careful	60% - 90%	Cleanup dense structures without affecting too much to visual appearance
Medium	approx 50%	Medium reduction which can show artifacts at closer range
Strong	20% - 40%	Strong reduction but also more visible artifacts
Coarse	approx 5%	Very strong reduction which should be only used for coarse LOD type of visualization (viewed from distance)

Percentage levels are only guidelines as actual result depends quite much from geometry structure.

When simplifying selected components use “Include” property mode “Selected components” and press “Simplify” button at command panel.

When simplifying whole layout use “Include” property mode “Whole layout” and press “Simplify” button at command panel.

After completing simplification (may take significant amount of time – for example 5 minutes for 10Million triangle model) results are rendered.

If results are not suitable press “Reset” to restore original visualization to test with different option.

Once results are suitable, record animation using simplified visualization.