

3D Juump Infinite Web User Manual

[UMW_EN] version 3.1


Introduction	4
1 - User Manual spots color code	5
2 - Overview	5
3 - Scope.....	5
Hub	6
1 - Login screen	6
2 - Project screen.....	7
Browser - Overview	8
1 - Configuration zone	9
2 - Filter zone	10
2.1.1 - Main features	12
2.1.2 - Additional features	15
3 - Search zone	15
3.1 - Main features.....	16
3.2 - Search result display	16
4 - Id-Card zone	16
5 - 3D zone	18
5.1.1 - Main features	18
5.1.2 - Selection	19
5.1.3 - Navigation.....	19
6 - Status bar.....	20
6.1.1 - Settings	20
6.1.2 - Help section.....	21
7 - Transversal tools ●.....	22
7.1.1 - Measure	23
7.1.2 - Cut Plane.....	25
Annexes	27
1 - Release notes	27

- 1.1 - 25/06/2019: version 3.1.027
- 1.2 - 24/08/2018: version 3.0.027
- 2 - Range of use28
 - 2.1 - Minimum requirements.....28
- 3 - Export control classification28
- 4 - Third-party software licenses.....28

Introduction

1 - User Manual spots color code

Green spots ● indicate  information.

Red spots ● indicate an  has been operated on information formerly provided.

2 - Overview

The 3D Juump Infinite main application displays a selected DMU in 3D and lets the user navigate, search and filter both 3D and metadata.

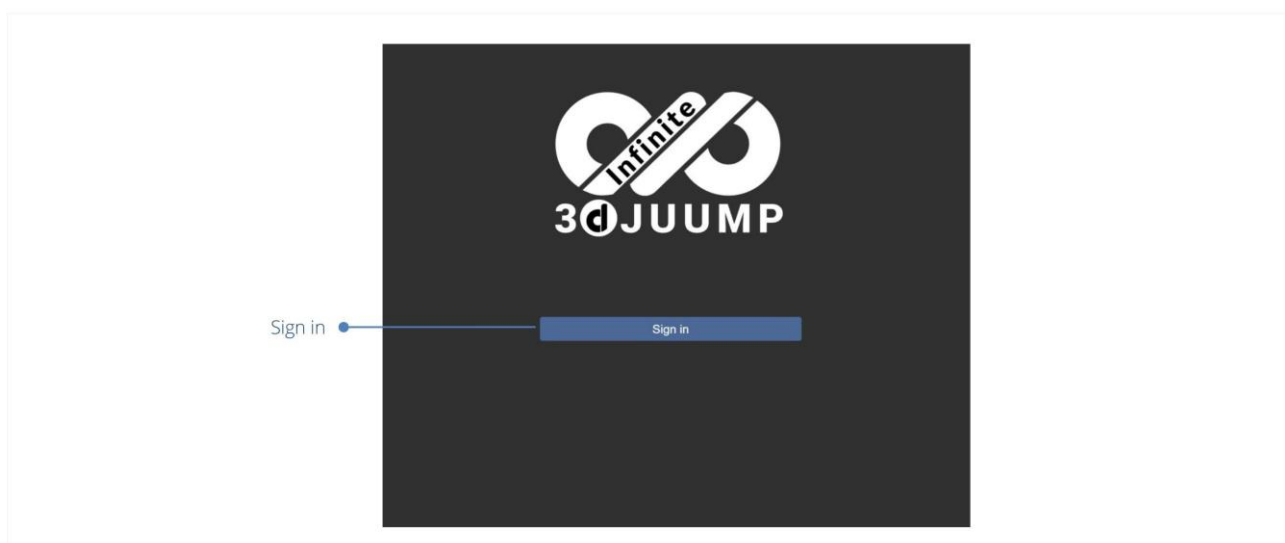
3 - Scope

This document thoroughly describes 3D Juump Infinite Web application and is intended for end-users. It covers neither the back-end administration of 3D Juump Infinite, nor the integration of 3D Juump Infinite in your enterprise infrastructure and production process. These aspects are covered elsewhere in dedicated documents.

Hub

1 - Login screen

When launching the web version of 3D Juump Infinite, the login screen appears



Login screen

To connect to the application, you must authenticate yourself to the information system set up in your organization. Feel free to contact your local administrator to check your access rights.

Sign In: Enables to validate

2 - Project screen

The project screen grants access to projects management



Login / Project

Project: Incremental set of data describing a DMU.

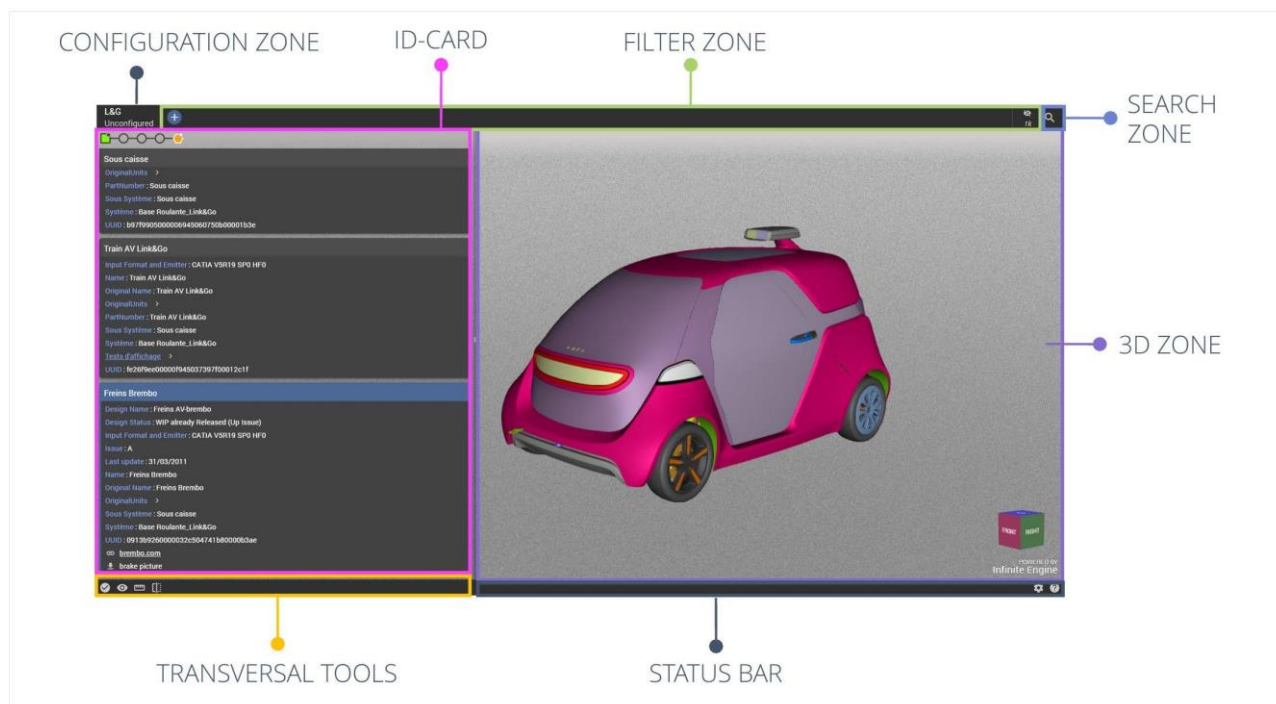
Build: Project data compilation performed on a specific date.

Start: Launches the application.

Not your account ?: Allows you to change users.

Browser - Overview

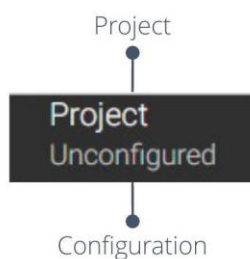
3D Juump Infinite Web-Browser is a *Consultation* environment enabling to search, filter or analyse quickly a project. No interaction can be saved. Its HMI is composed of main zones. Each zone plays its own and well-defined role.



HMI Display

1 - Configuration zone

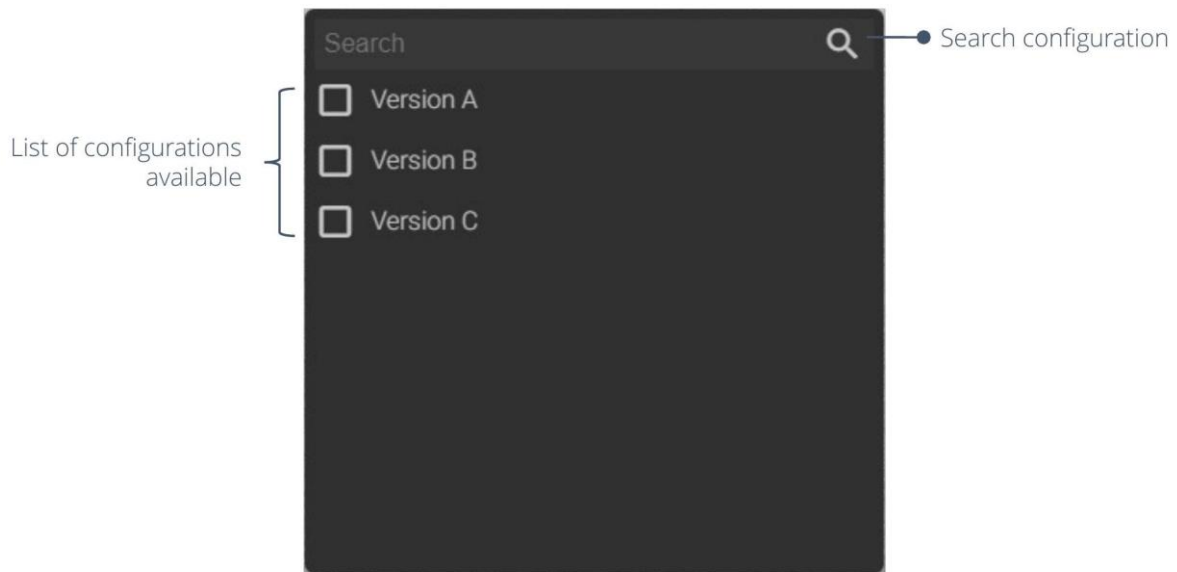
The *Configuration zone* grants access to the Project and Configuration Information.



Title bar details

Project: Incremental set of data describing a DMU. It usually corresponds to a product (or product-line) level assembly, including all its Configurations. For instance, a vehicle manufacturer would probably opt for one project per car model.

Configuration is a DMU set-up.



Configuration

Search configuration: At this particular location, tool to look for a specific configuration.

List of configurations available: List of all configurations available for the selected Project.

2 - Filter zone

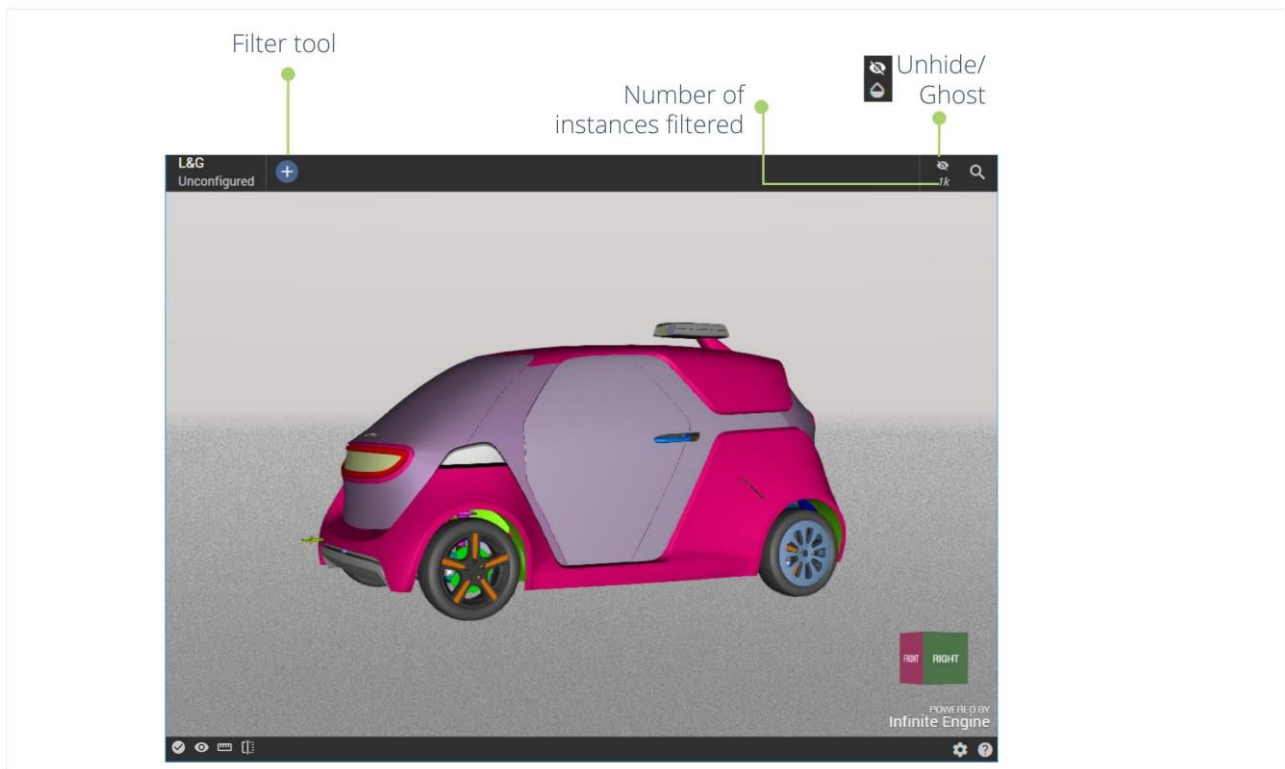
The *Filter zone* allows to focus on a sub part of the whole DMU by specifying parts to remove or to keep depending on specific criteria.

It grants access to filtering mechanism in which successive Filters are displayed from left to right.

Filter: A particular criterion that adds (resp. removes) matching instances to (resp. from) a *Layer*.

Layer: A set of visible instances resulting from the application of several *criteria*.

Criterion: A value, partial value or set of values that an instance must match. A criterion can apply either to an instance's part model (metadata) or to its instanced properties (bounding box).



Filter zone

Filter tool: allows to create a filter on any metadata or 3D box which will be added to the current view.

Unhide: Ghosts elements filtered.

Ghost: Hides elements filtered.

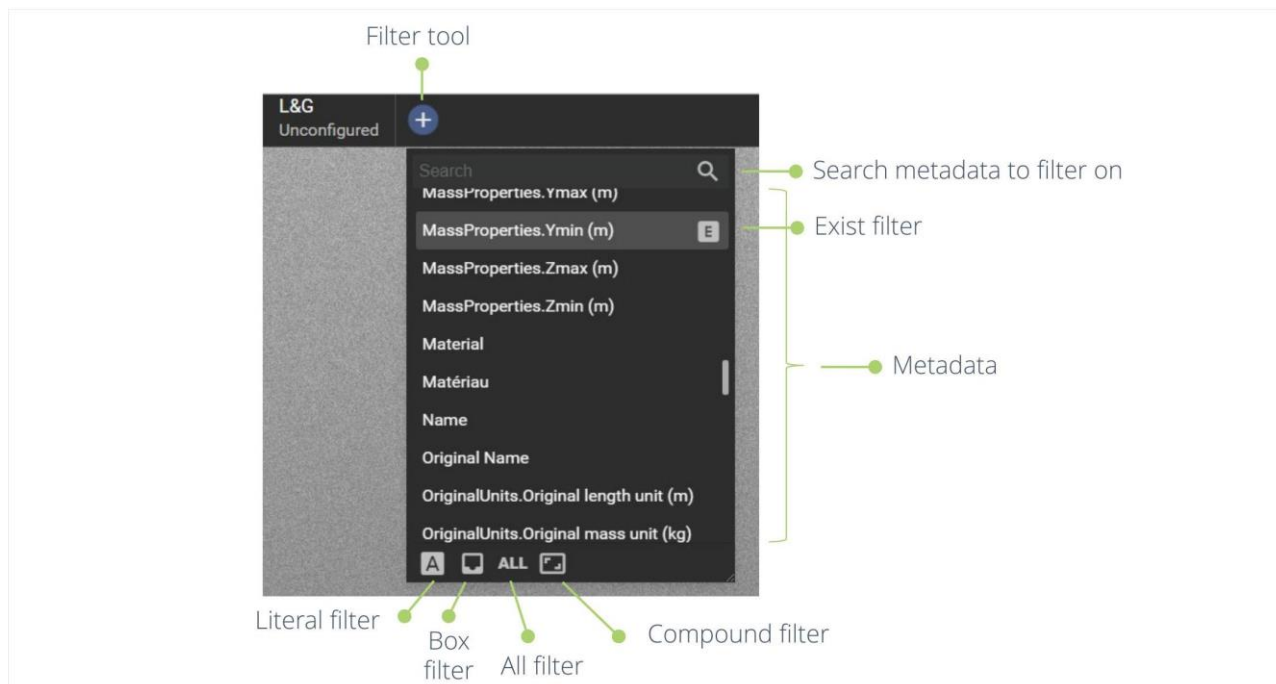
Number of instances filtered: Number of instances that match a filter (or a set of filters).

Instance filtered: Occurrence of *Parts* resulting from a filter.

Instance: Occurrence of a *Part*.

Part: Model or template, be it an assembly or a single element. This part is referenced by the digital mock-up but is not present (*instanced*) within it. It is not localized in the digital mock-up. (Ex: a wheel).

2.1.1 - Main features



Filter zone / Main features

Filter tool: Creates a new filter, it will be added to your current view.

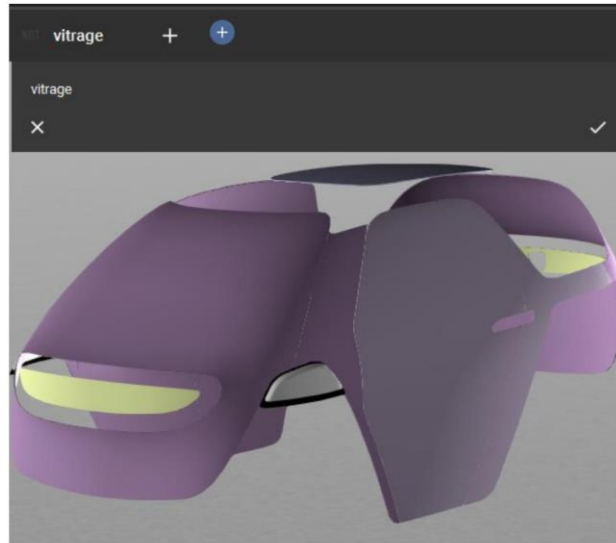
Search metadata to filter on: Tool enabling to look for a particular word or phrase/group of words in the DMU (metadata value).

Exist tool: Tool enabling to filter components on existing attributes.

Metadata: List of data participating to the definition of a part but not represented in 3D. Metadata are composed of a Key (the name of this particular field of metadata) and a Value (either a textual, numeric or datum value, or a complex value like a list or a map).

Different kinds of filters can be applied on Metadata:

- Enumerated attribute: lists existing values available.
- Non-Enumerated attribute: available when metadata values are too large to be listed, enables to search for any value; please refer to here-under [additional features](#) for exact / partial match filters.
- Numerical attribute: enables to filter metadata by figure and/or range of figures.
- Date attribute: enables to filter metadata by date and/or range of dates.
- Boolean attribute: enables to filter true/false metadata.



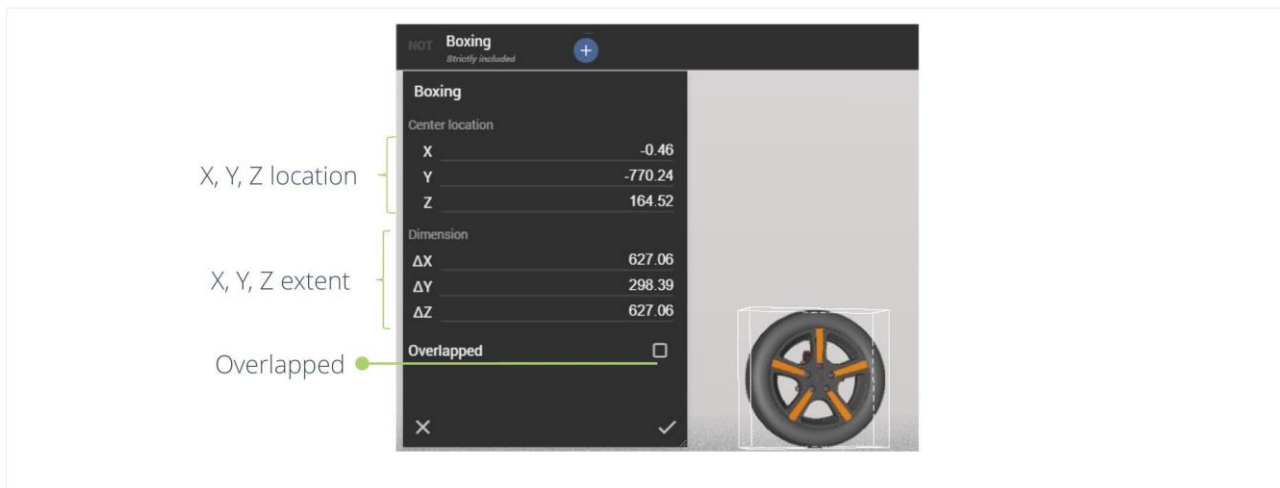
Filter zone / Literal Filters

Literal filter: Tool enabling to filter on a text Search, either among Metadata or on a precise one. This Filter functions similarly with [Search](#). Specify any metadata in this box, result will be filtered in the full DMU and displayed in the 3D view.



Filter zone / All Filters

All filter: Tool enabling to filter the full DMU (appear or hide all the DMU).



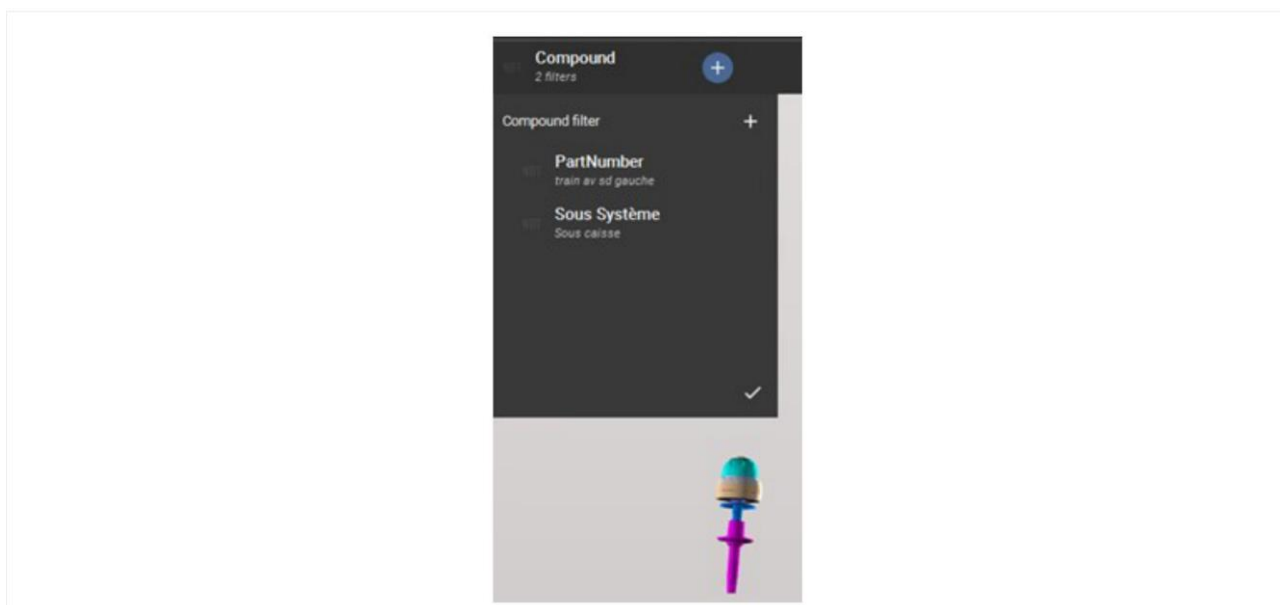
Filter zone / Box Filters

Box filter: Tool enabling to filter on a 3D box. Click on an element and a 3D box appears around this designated element. Otherwise, the location and dimension of the box can be modified manually by entering numerical values in the dedicated window.

X, Y, Z location: Specifies where the box is located within the DMU (based on axis x, y and z).

X, Y, Z extent: Set the dimensions of the box (based on axis x, y and z).

Overlapped: Option enabling to specify that only fully included parts in the 3D Box will be taken into account. Unless stated otherwise, 3D box crossing parts are added to the selection.

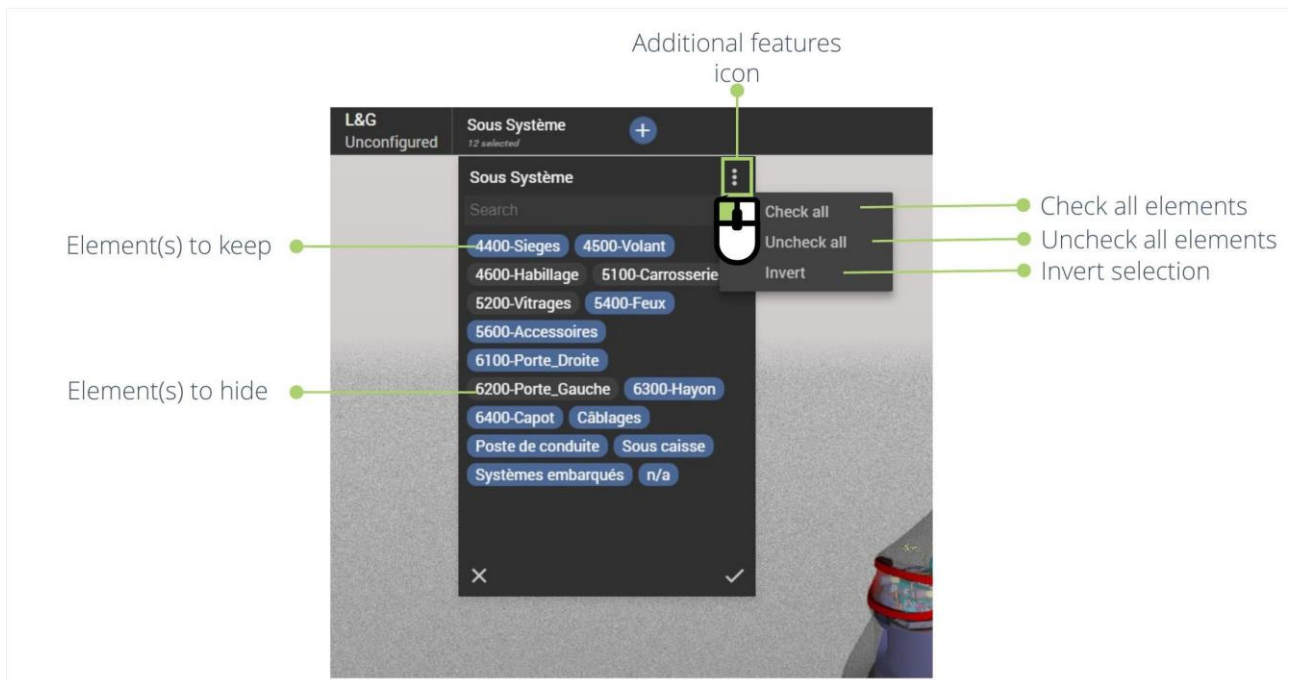


Filter zone / Compound Filters

Compound filter: Tool enabling to filter further several criteria at the same node in the product structure scheme

2.1.2 - Additional features

When an enumerated or Non-Enumerated filter has been selected, additional features are available by clicking in the additional feature icon



Filter zone / Additional features

Additional feature icon : shows/hides additional feature menu

Check all elements: Select all elements in the selection.

Uncheck all elements: Unselect all elements in the selection.

Invert selection: Select elements formerly unselected in the selection and unselect elements formerly selected in the selection.

When clicking on the filtered element, the background color changes :

Element to keep: Displays on a blue background elements to be shown on the 3D view for which the typed search matches the settled metadata .

Element to hide : Displays without any background elements to ignore on the 3D view

3 - Search zone

The *Search Zone* enables to look for a particular word or phrase /group of words in the DMU (mainly by Metadata).

Search in this zone is limited to the first 49 results. Should the query return more than 49 results, the mention *49+ results* appears on the right of the query search box and "... " appears at the end of the search box. This information indicates the search should be refined to get more precised results.



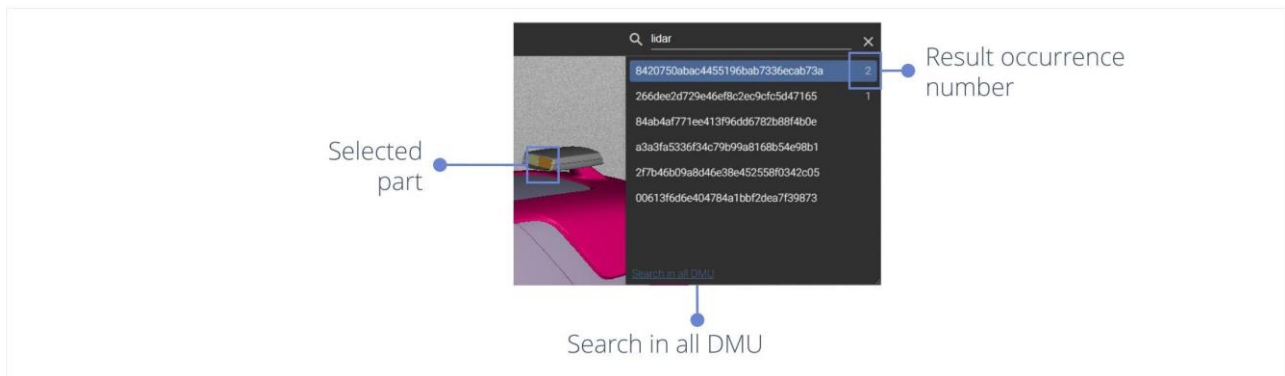
Search zone

3.1 - Main features

- Type the value to search and press [Enter] in its name but also its metadata values
 - eg. abc to get all parts containing abc (abc, abc123, xyzabcdef ...)
- The value is not case sensitive
 - eg. abc will also return parts named ABC

3.2 - Search result display

Once a search has been launched, new features are accessible.



Search zone / Launched search display

A left click on the designated result under the search bar displays:

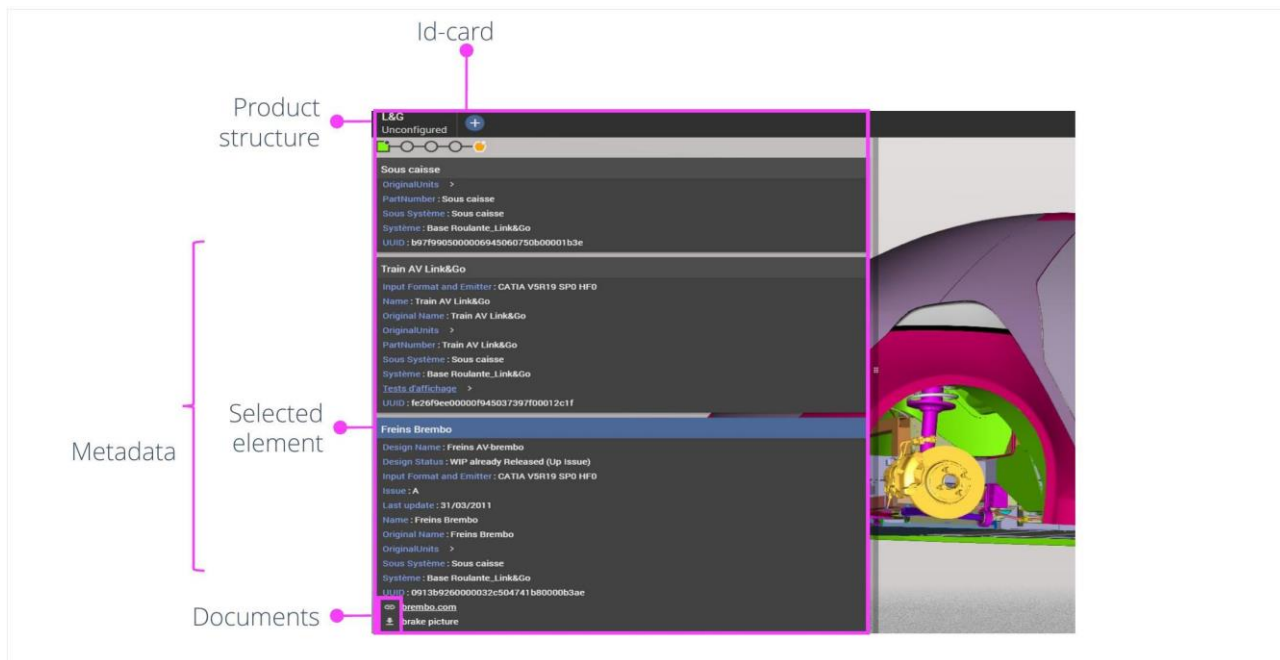
- **Result occurrence number:** number of result occurrences in the DMU
- **Selected part:** selected part in Search result is also highlighted in the 3D view.

💡 Corresponding id-card information scrolls up/down the product structure accordingly.

Search in all DMU: Starts a search not limited to the current display if a filter has been previously launched

4 - Id-Card zone

The *Id-Card* is the list of ordered metadata of elements.

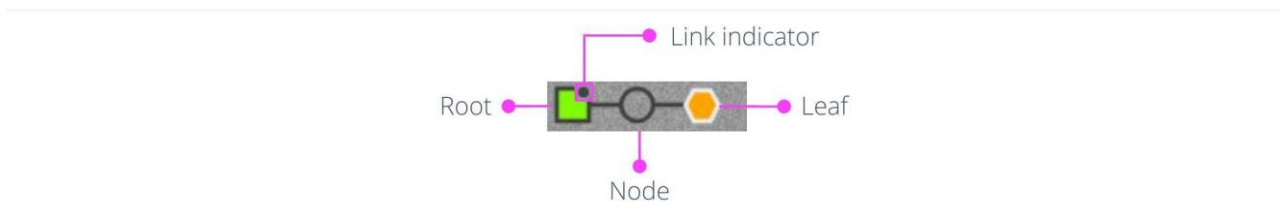


Id-Card

Selected element: Selected metadata; using the image of a tree, an element is a leaf.

Metadata: Data participating to the definition of a part but not represented in 3D. Metadata are composed of a Key (the name of this particular field of metadata) and a Value (either a textual, numeric or datum value, or a complex value like a list or a map).

Product structure: Full list of the elements of a hierarchy; using the image of a tree, the product structure is a tree.



Product structure

Root: First element of a hierarchy; using the image of a tree, a root is a trunk.

Node: Basic element of a hierarchy; using the image of a tree, a node is a branch.

Leaf: Element at the very bottom of a hierarchy.

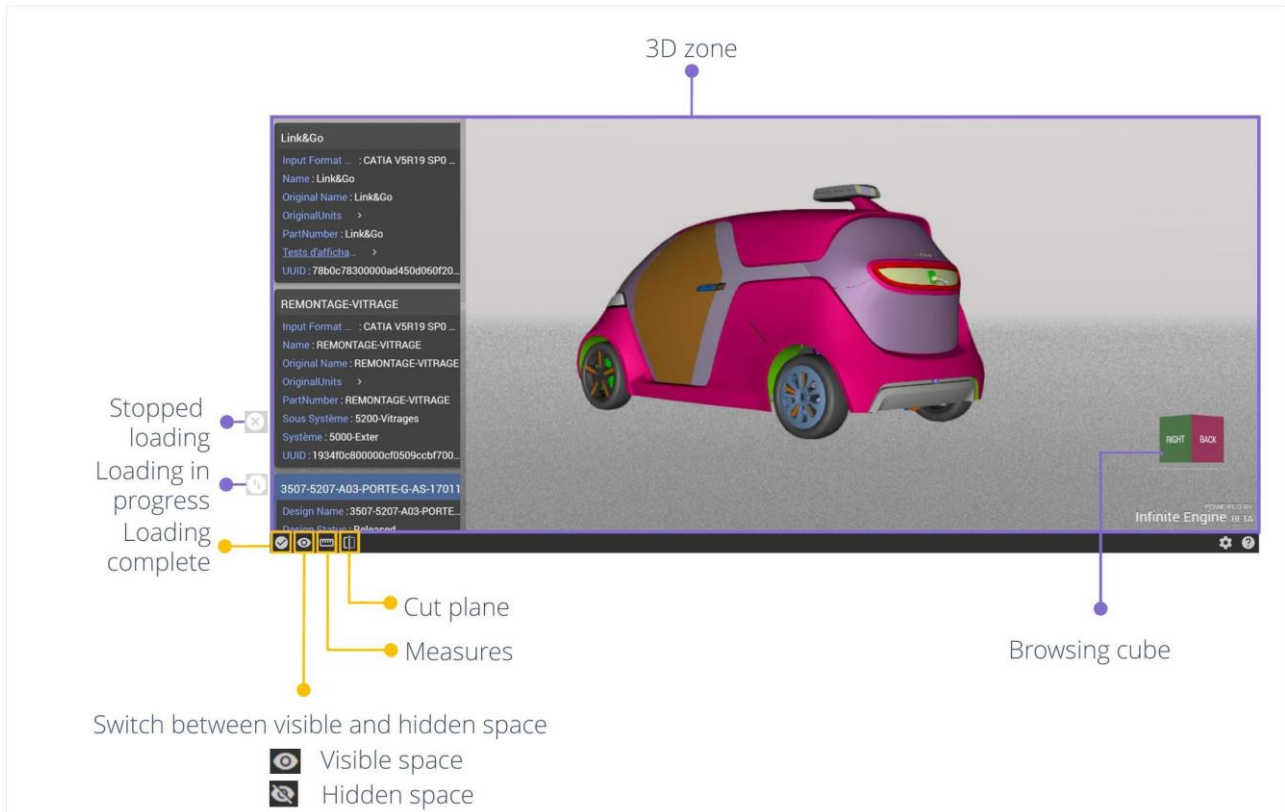
Link indicator: Sign indicating document is linked to the designated element.

Documents: section displays the lists of documents available from the root and the selected elements. They are provided by the integrator upon DMU generation. They can be .pdf, images, links, ...

5 - 3D zone

The **3D Zone** is a digital working zone where your mock-up is displayed in 3D.

5.1.1 - Main features



3D Zone

Loading: Program currently being copied from storage to your memory. Display is not totally fulfilled.

Loading complete: Means all geometries are loaded.

Stopped loading: Means performance limit has been reached.

Loading in progress: Means geometries are currently still loading.

● **Measures:** Allows to calculate measures between elements.

● **Cut plane:** Slices the DMU.

Switch between visible and hidden space :allows to switch between the visible and the hidden spaces

Visible space : The icone enables to come back to the visible elements space

Hidden space : The icon enables to display in one click all the hidden elements

Browsing cube: Tool to identify the current scene orientation from the ground plane. This element is decided and implemented by the integrator.

5.1.2 - Selection

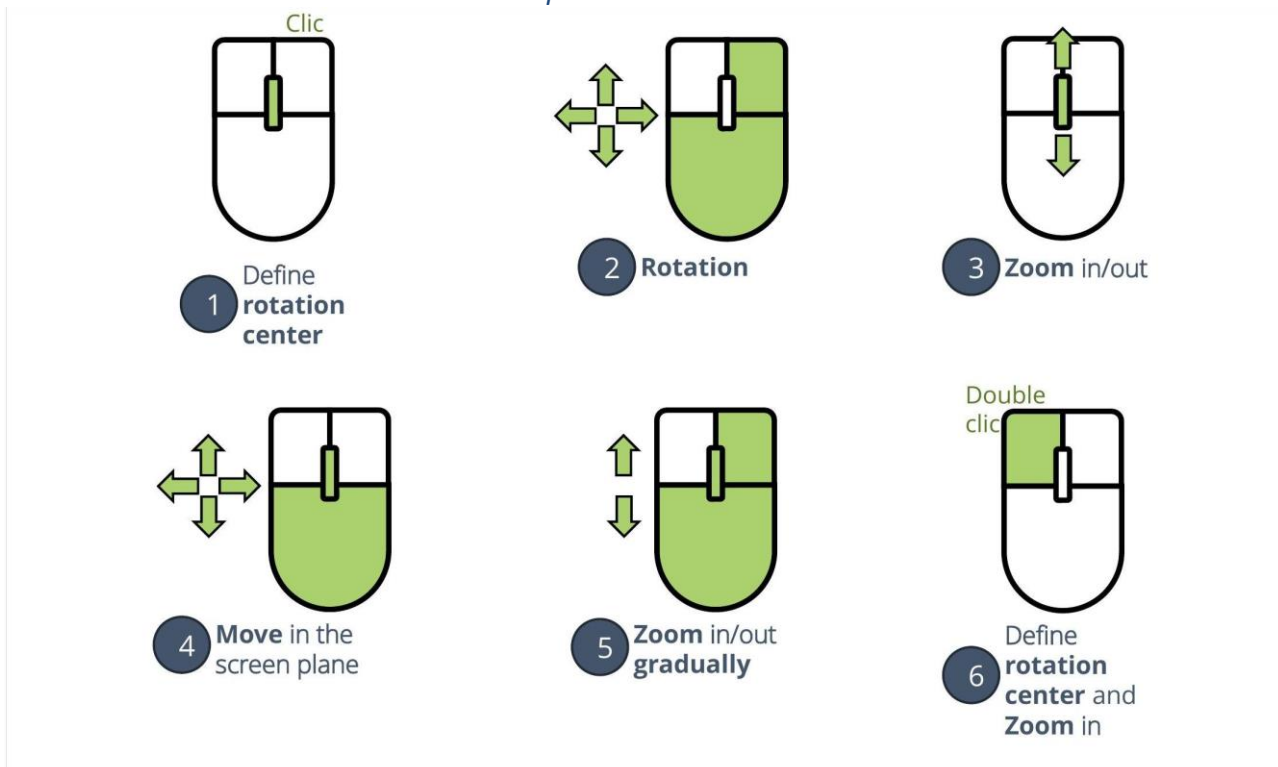
Mouse left-click enable(s) to select/unselect designated element(s).

💡 Simply press [CTRL] + left-click on designated element(s) to unselect or add them to the current select.

5.1.3 - Navigation

DMU browsing implies special basic manipulations using the mouse.

5.1.3.1 - Mouse manipulation



Orbit Mode browsing

Define rotation center: Defines the rotation center of the DMU. Object is automatically centered in the plan.

Rotation: Rotates the object in the 3D view.

Zoom in/out: Increases/decreases the magnification of the designated object.

Move in the screen place: Moves the object in the image plan (pan).

Zoom in/out gradually: Increases/decreases gradually the magnification of the designated object.

Define rotation center and Zoom in: Defines the rotation center of the DMU and increases the magnification of the centered designated object.

5.1.3.2 - Touchscreen Navigation



Orbit Mode - Touchscreen Navigation

Rotation: Rotates the object in the 3D view.

Zoom in/out: Increases/decreases the magnification of the designated object.

Move in the screen plane: Moves the object in the image plan (pan).

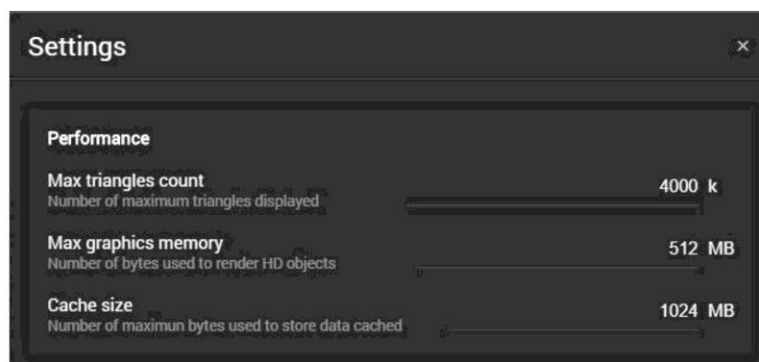
6 - Status bar



Status Bar

6.1.1 - Settings

The *Settings* is the control panel that enables the user to configure 3D Juump Infinite appearance and actions.



Status bar / Settings

Max triangles count: Settings that caps the number of triangles rendered from each frame. Modern *GPU*¹ are able to display tens of millions of triangles per frame without altering the user

¹ *Graphic Processing Unit*, the additional video card inside a computer, in charge with graphics.

experience, though some low-end integrated [GPU](#) may struggle to process more than 20M triangles.

Max graphics memory: Settings that caps the [VRAM](#)² usage of the geometry loader. Loaded geometries reside in [VRAM](#) so this settings needs to be high enough lest it limit the overall number of high-detailed geometries visible at the same time.

Cache size: The amount of disk space allocated to the [Cache](#).

6.1.2 - Help section

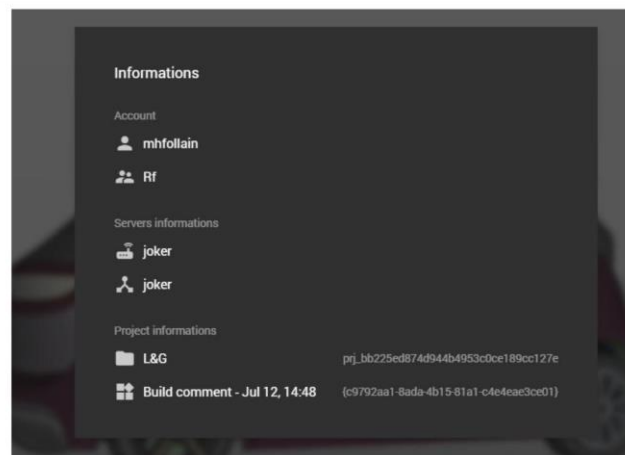
A click on this icon grants access to the usermanual, the list of used licenses and information on the user profile, project and servers



Status bar / Help section

Help : link to the user manual

Information : information on the user profile, project and servers



Status bar / Help section / Information

License : link to the Third-party software licenses used by the web version of 3D Juump infinite

About : link to documents and website

² Video RAM, the memory of the GPU.



Status bar / About

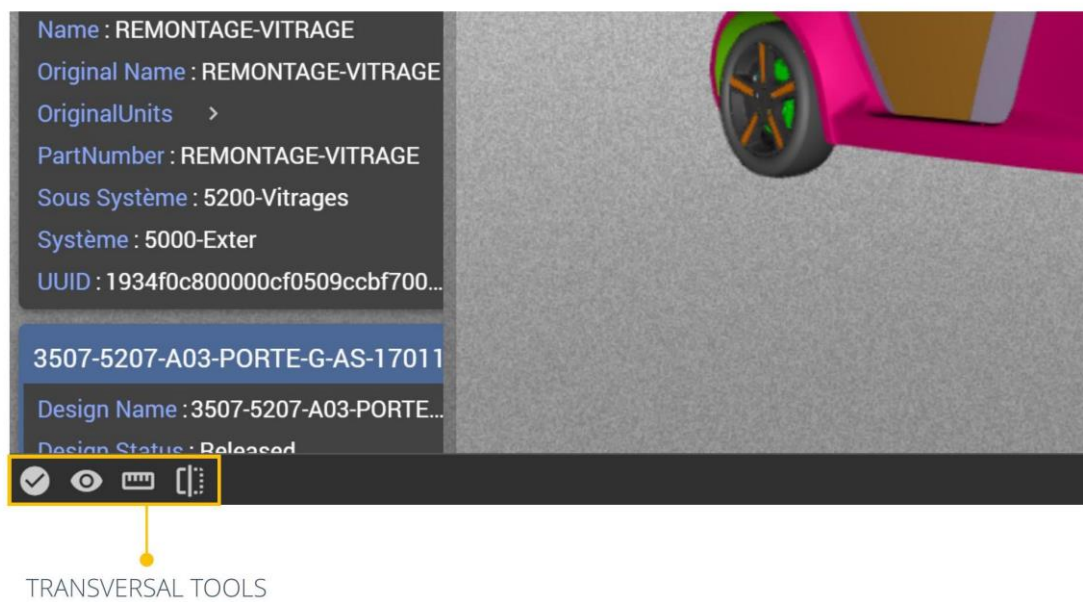
User Manual : link to the user manual

License information : link to the Third-party software licenses used by the web version of 3D Juump infinite

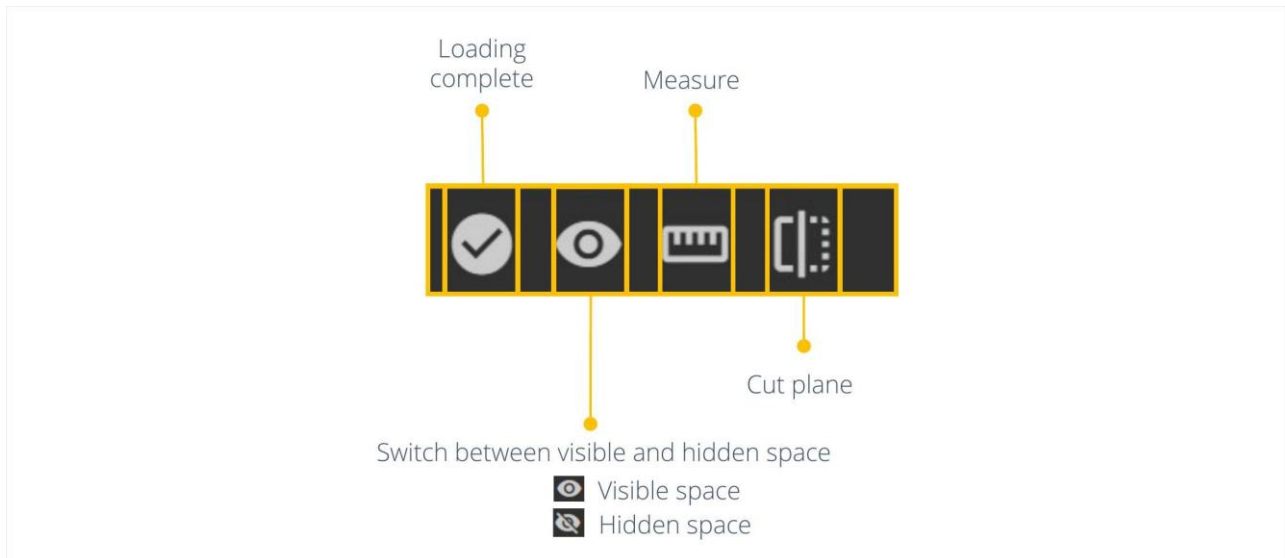
Editor Web Site : link to the Editor web Site

7 - Transversal tools ●

Transversal tools is a group of tools provided to interact within the DMU.



Transversal tools



Transversal tools details

Transversal tools is a group of tools provided to interact within the DMU.

Loading: Program currently being copied from storage to your memory. Display is not totally fulfilled.

Loading complete: Means all geometries are loaded.

Stopped loading: Means performance limit has been reached.

Loading in progress: Means geometries are currently still loading.

● **Measure:** Allows to calculate measures between elements.

● **Cut plane:** Slices the DMU.

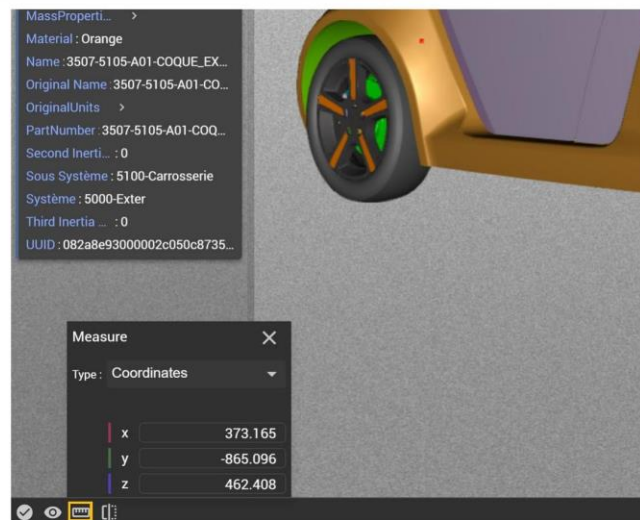
Switch between visible and hidden space :allows to switch between the visible and the hidden spaces

Visible space : The icone enables to come back to the visible elements space

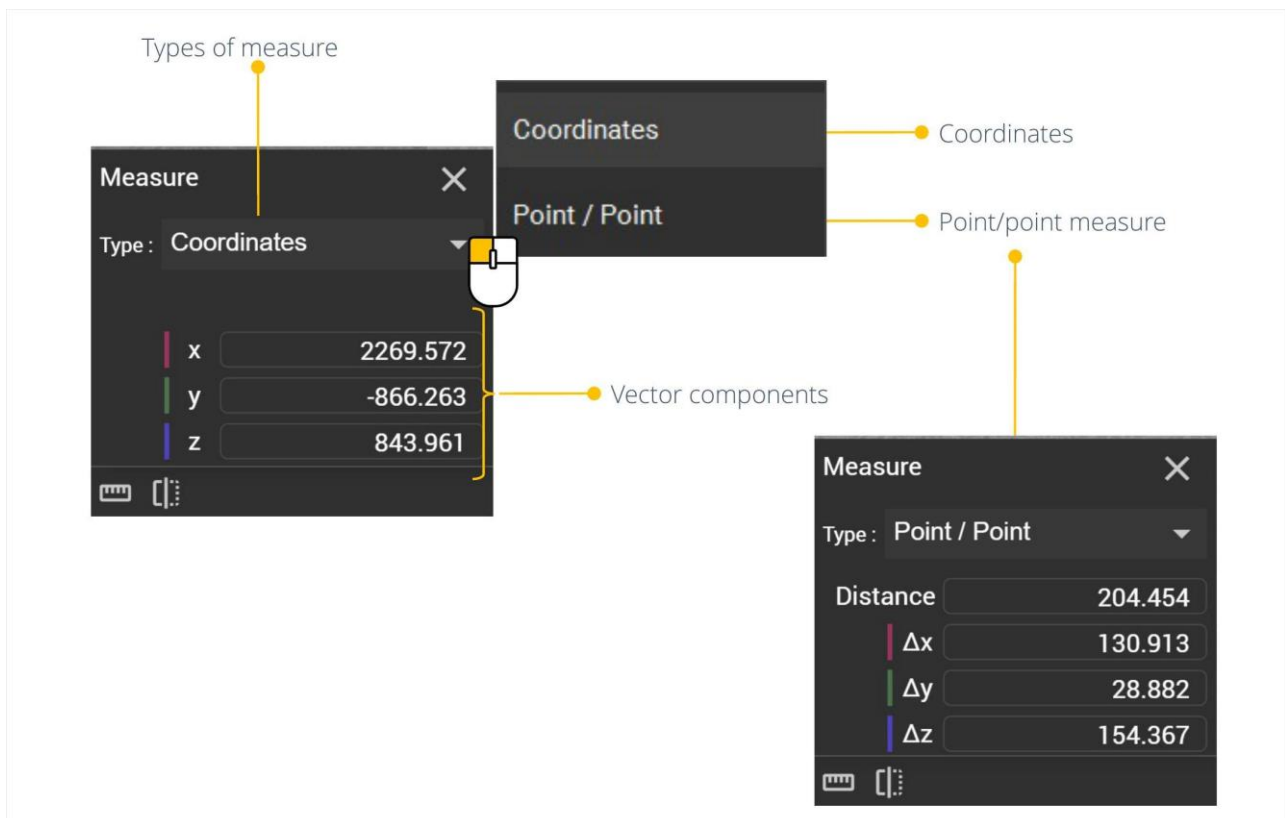
Hidden space : The icon enables to display in one click all the hidden elements

7.1.1 - Measure

Measure: Allows to calculate measures between elements.



Measure tool



Measure tool details

Two **Types of measure** are available: Coordinates, Point/point.

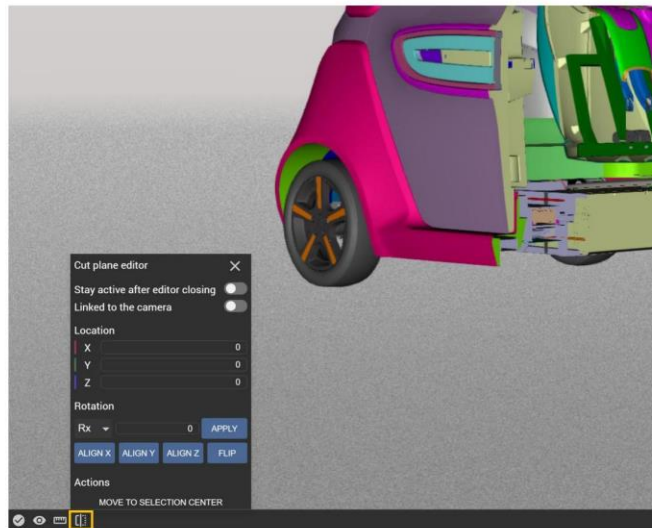
Coordinates: Indicates the designated specific point coordinates (x, y and z) within the DMU.

Point/point measure: Calculates the distance between one point and another in the DMU.

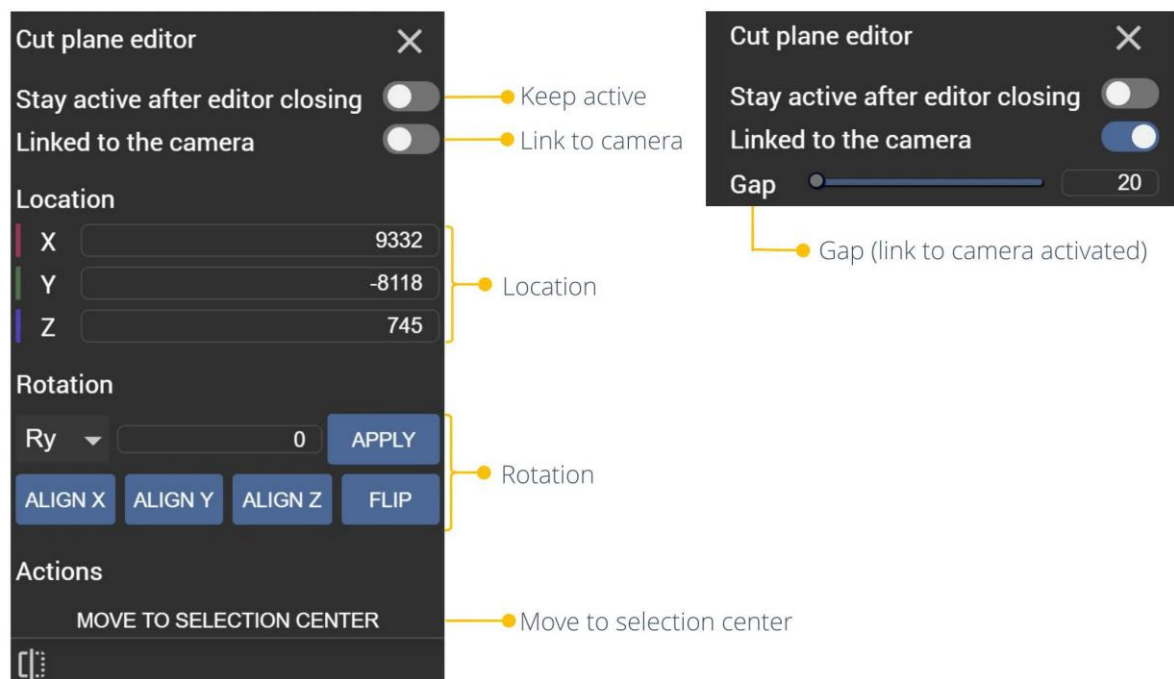
Vector components: Axis projected lengths.

7.1.2 - Cut Plane

Cut plane: Slices the DMU.



Cut Plane tool



Cut Plane tool details

It is possible to create one single cut plane, to move and rotate it in the DMU as wished.

Keep active: Tool enabling to remain Cut plane active while closing its edit window.

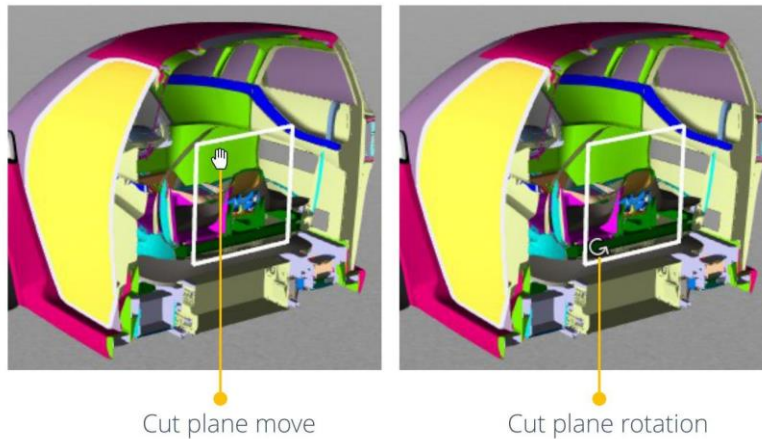
Link to camera: Forces the cut plane to be operated from the camera viewpoint.

Gap (link to camera activated): Depth of field between camera and cut plane. When zooming in/out, the cut plane moves according to the gap applied.

Location: Information enabling you to locate your cut plane in the DMU.

Rotation: Information enabling you to rotate your cut plane in the DMU.

Move to selection center: Tool enabling to move the Cut plane automatically to the center of a selected element.



Cut Plane move and Cut Plane rotation

Annexes

These annexes contain:

- the release notes,
- the list of known limitations
- the ECCN
- the list of third-party licenses

1 - Release notes

1.1 - 25/06/2019: version 3.1.0

Client

- Connection via openIDConnect
- Added IE11 support
- Added cut plane

1.2 - 24/08/2018: version 3.0.0

Initial release.

2 - Range of use

2.1 - Minimum requirements

The ∞client runs on a Browser with the support of HTML5, CSS3, ECMAScript 5 and WebGL 1. The Application has been tested with the browser Chrome 64bits version 67, Firefox 64bits version 61 and Edge 64bits version 41.

3 - Export control classification

The Software, which integrates dual use information security items of American origin (ECCN 5D992.c <10%), is subject to the US Export Administrative Regulations (EAR) 15 C.F.R. part 730 et seq. for the country Group E:1 and E:2 which are, at the date of the License Terms and Conditions: Iran, North Korea, Sudan, Syria and Cuba. In particular, the User shall not use, export or re-export the Software in those countries and with end users or for end uses in breach of the US export control regulations.

The Software has been the subject of a declaration of operations relating to a means of cryptology to the ANSSI (Declaration N ° 17070363). However, the Software does not come under Regulation (EC) N ° 428/2009 of May 5, 2009, setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items, as confirmed by the Direction Générales des Entreprises / Services des Biens à Double-Usage Goods in his mail N ° FR 80404.

4 - Third-party software licenses

The details of the used licenses are available in the [Status Bar](#), by clicking on About



[About/Licenses](#)