

Release ViSu 9.16.0

Enhancing performance, robustness, and user experience



Release Objectives

- Accelerate the deployment of Desktop mode
- Reinforce the robustness of the application
- Improve the visual rendering of the environment

A version focused on desktop, 3D performance, and application stability

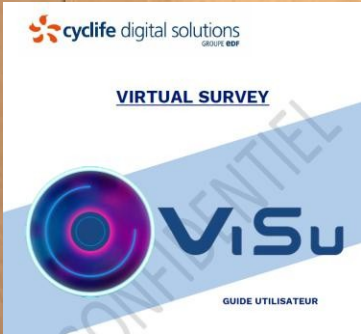
Key Features

-  **Improved Desktop ergonomics**
Multi-monitor up to 6, redesign of the toolbar
-  **Near real-time display**
Point clouds and massive 3D models
-  **Optimized visual rendering**
Strengthened outlines for better readability
-  **Loading time reduced by 5x**
Loads 3D models faster
-  **Stabilization of modules**
Segmentation & Sharing

General Updates:

ViSu User Guide Available:

The **ViSu user guide** is now **available**. You can find answers to all your questions there
Various examples and **use cases** are provided for each **feature/module**



Managing a second Flystick (Powerwall):

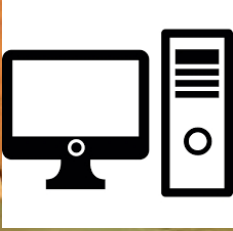
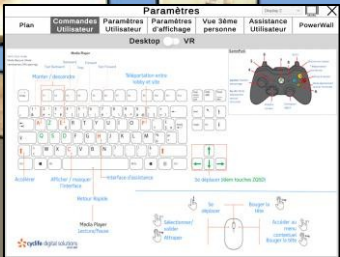
In **Powerwall mode**, it is now possible to connect a second Flystick 2+.
(Note: Navigation with a single Flystick is still available)

This provides **better ergonomics** for **navigation** and mimics a **VR headset setup**.
Find the keys in the control guides



Updated "Control Help" for Desktop and VR

Control guides are **available** for **desktop, VR, and Powerwall**.
In French and English.
These settings **adjust based on the connected VR headsets**. You can find them in the "Settings" interface, under the "User Controls" tab



Improvements to the VR/Desktop Switch

The option to **switch from VR to Desktop** or from **Desktop to VR** has been **improved**.

The **transition time** has been **reduced**.

Desktop Ergonomics Improvements:

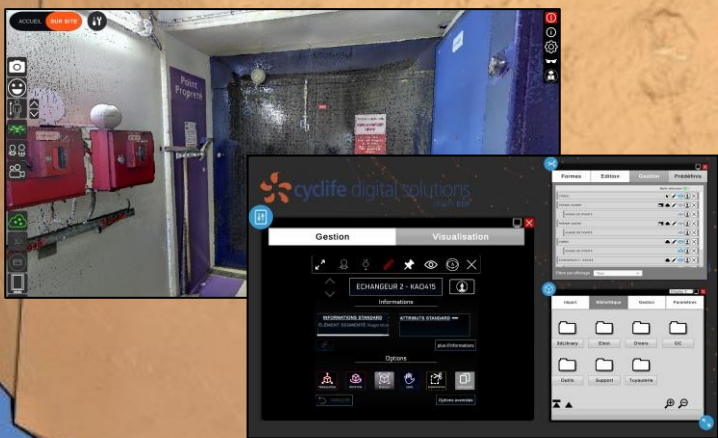
Multi-screen:

ViSu supports multi-screen setups. Users can work on up to 8 screens.

This allows for:

- A dedicated navigation screen that isn't too cluttered
- Work screens hosting the tools

Notes: Once in multi-screen mode, ViSu windows are in full-screen mode.



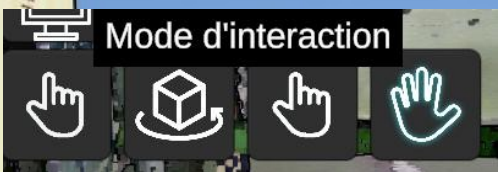
New toolbar design:

The **Desktop toolbar** has been redesigned to **improve usability and readability**. It now features a **category-based organization consistent with VR**, along with a **streamlined design and redesigned icons**.

It can be expanded or collapsed.

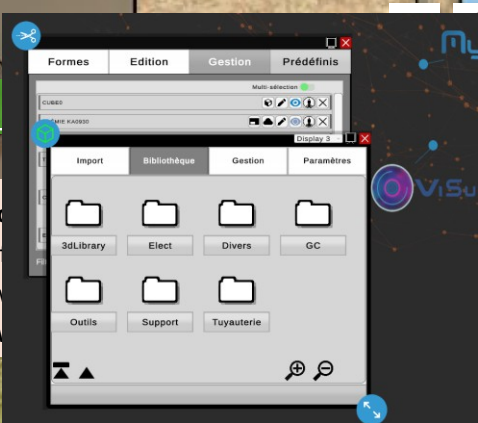
Change to the default interaction mode:

In Desktop mode, the **default interaction mode** has been changed and set to **"no interaction."** This change helps **reduce accidental clicks** and **minimizes visual clutter** caused by multiple property windows opening. This can be adjusted via the interaction modes.



Active tablet in the foreground:

When you **hover over a panel**, it automatically moves **to the foreground**. This allows for **better management of overlays** and improves readability when multiple panels are open.

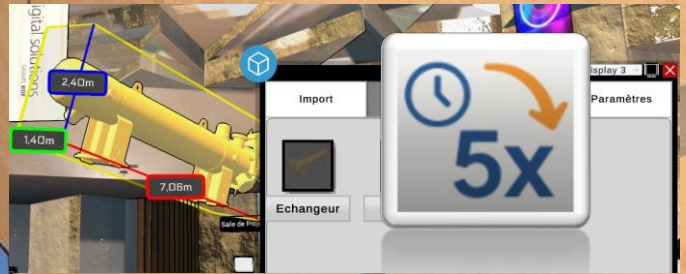


Improvement to environment rendering:

Phase 1 of improvements to 3D model loading times:

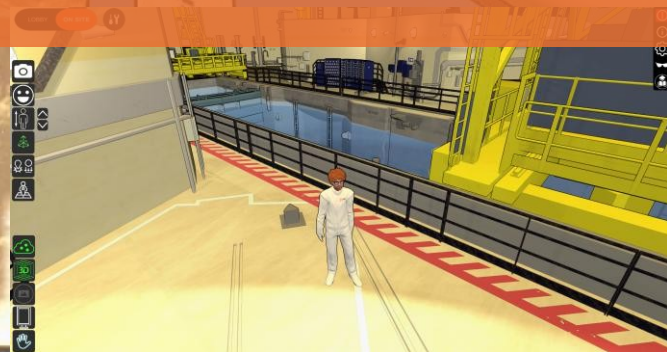
The first phase of improvements to **3D model loading times** has been completed.

The **performance gain is significant**, with loading times **reduced by a factor of approximately 5**.



New improvement to 3D model refresh:

The **refresh rate for 3D models** is now close to **real-time**. **Latency during navigation on large 3D models** has been significantly reduced.



Management of textured 3D model environments

ViSu now supports **the display and navigation of textured 3D models**.



Further improvement to point cloud refresh

Point cloud refresh now operates now operates in **near real-time**, improving the fluidity of the visualization.

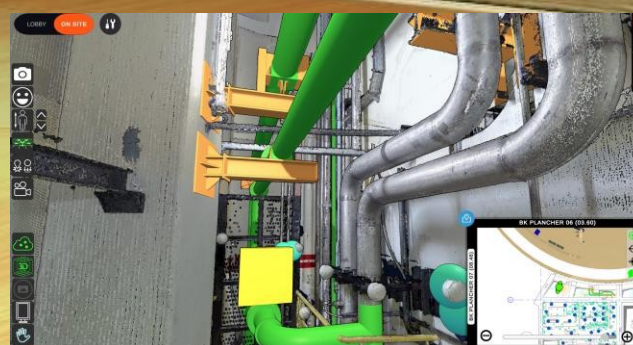
Visual enhancement of point clouds (Contour and light highlighting)

The **point cloud** has been **visually enhanced (contour highlighting)** for **better visibility**.

A beta version is available.

In the "Settings" interface, "Display Settings" tab, "EDL Status (Beta)" option

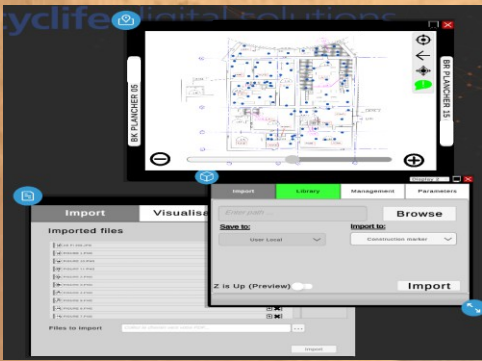
This feature is **available in VR/Desktop /Powerwall**



What's New in Multi-User & VR-Learning

New tools synchronized in collaborative sessions:

New tools are now **synchronized** in collaborative sessions: **Plan tab**, **3D Models tab**, and **Documents tab**. When a user opens them, they become **visible and accessible to all participants**.

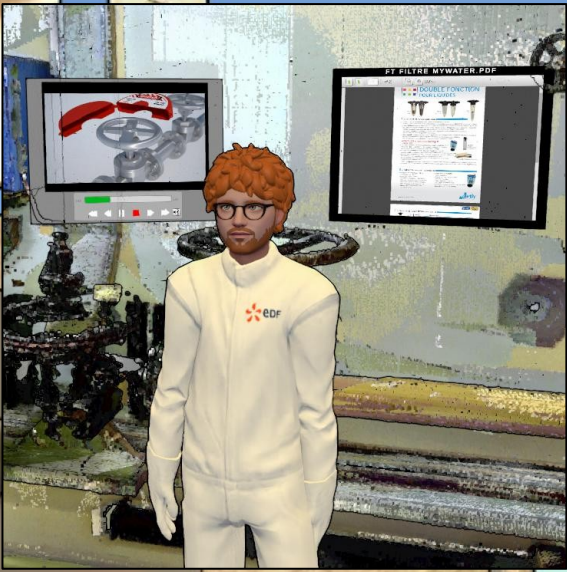


New tools saved in a VR-Learning:

New tools have now been added to VR-Learning: the **Plan tab**, the **3D Models tab**, and the **Documents tab**. During a learning session, when a user opens them, they are **saved in the learning session**.

Adding videos and PDFs to Learning

In **VR-Learning**, it is possible to include videos and PDFs



Add a custom photo to an avatar via the interface

When importing an avatar, the user can add a photo to it via the Avatar interface



Stabilization & New Features in the Sharing Module:

Stabilization of the Sharing module:

Significant stabilization of the **Sharing module** has been achieved.

As a reminder, the **Sharing module** allows **multiple users** to **work on the same data**.

There are **two ways to work with sharing**:

- **"Offline" Sharing:** Allows multiple users to work on the same data asynchronously. Notification system/update of shared data if modified.

Note: Equivalent to a read-only Word file on a network.

- **"Online" sharing:** Unlike "offline" sharing, this allows you to see everyone's changes in real time.

Note: Equivalent to a Word document online with collaborative editing.

There are **two types of sharing spaces**:

- **"Official" Sharing:** These are **officially designated shares** made **available to all users**. When ViSu is opened, they are accessible to users. These shares are added only by the Cyclife Digital Solutions Platform administrator via the Cyclife HUB interface.

- **"Custom" shares:** These are **shares that can be created by any user**. Once the shared space is created, it can be shared with other users so that they can subscribe to it. Users who subscribe to the same workspace can collaborate on the data contained within it.

For more information, see the [ViSu user guide](#), §4.6 Shares



Ability to add documents to shared folders:

You can add documents (images, videos, PDFs) to shared folders to collaborate on this data.

Setting up an external folder in the shared folders:

This **external folder** allows you to **save and import 3D models without having to open ViSu**.

How it works:

- A user or a routine places 3D models in the external folder.
- When ViSu is opened, users **subscribed to the share** see the models **loaded automatically**.
- **Conversion to the ViSu format** is performed **only once**, by the **first user** to open ViSu.
- Other users can immediately access the converted file and don't have to for it to load.

Incorporation of official shared folder names entered via the HUB

In the HUB, the **administrator** can **create official shared folders** and give them a custom name. **ViSu** now **manages these folders**.



Stabilization & New Features in the Segmentation Module:

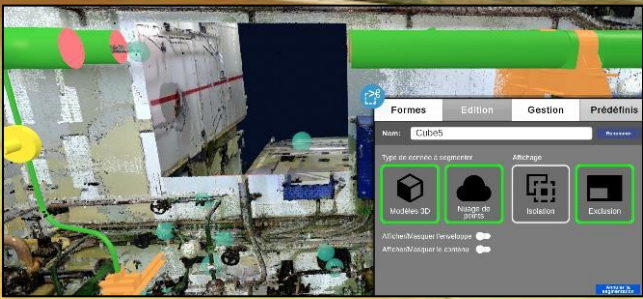
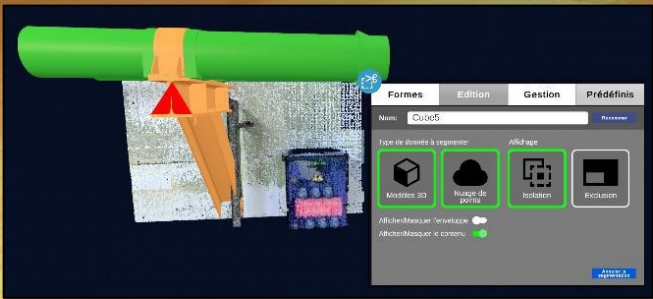
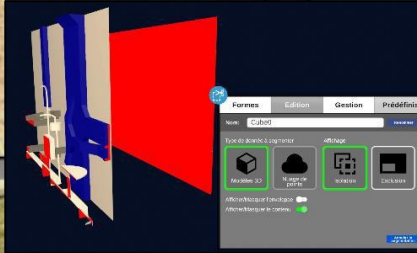
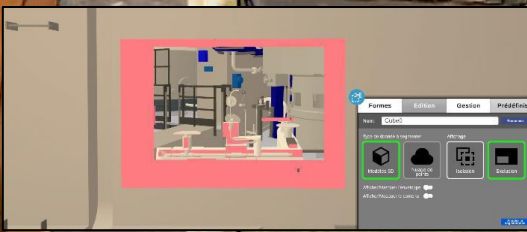
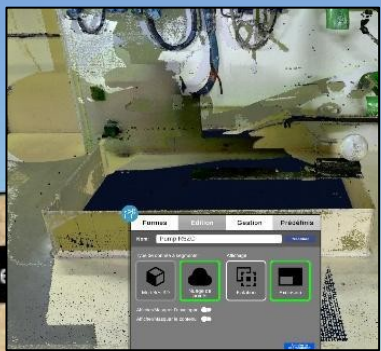
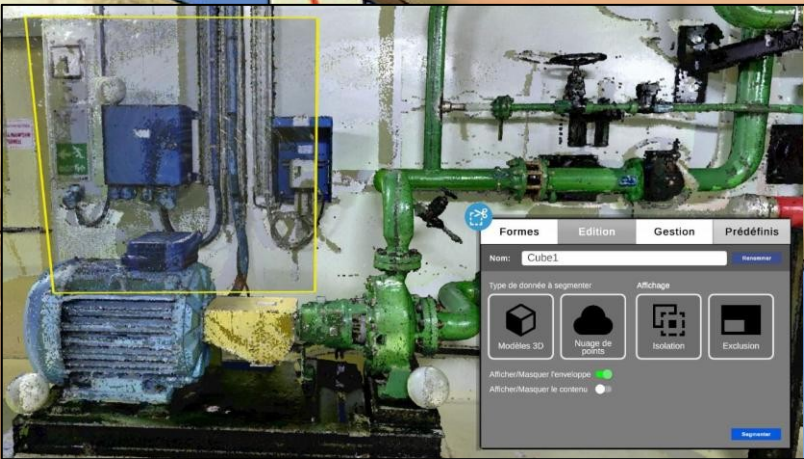
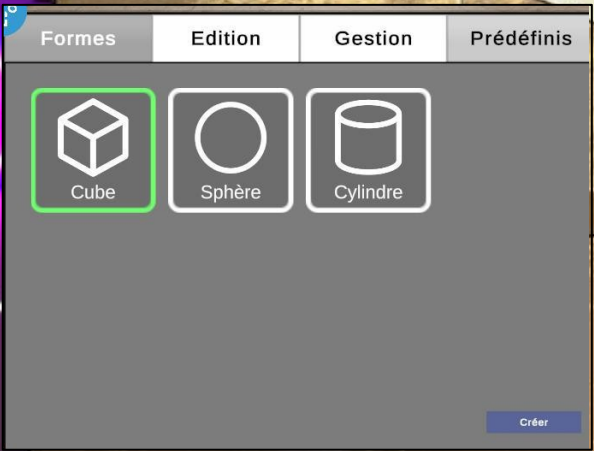
Improvements & Stabilization of the Segmentation Module

The segmentation engine has been significantly improved and stabilized:

- **Smoother refresh of the point cloud** after segmentation, now **with little to no impact**.
- **Fixes for major bugs** related to segmentation.

As a reminder, the segmentation module allows you to:

- **Create** segmentation envelopes (Cube, Sphere, Cylinder)
- The user can choose the type of data to segment: 3D models only, point cloud only, point cloud, or both.
- Once a segment has been created, the user can move it, isolate it, exclude it, etc. **For more information, see the ViSu User Guide, Section 4.2.2.6.8. Segments**



Stabilization of the Training Module:

Stabilization of the Training Module:

Significant stabilization of the Training Module has been achieved.

As a reminder, the **Training Module** allows a trainer/instructor to independently create unscripted training sessions*.

(*) Unscripted training courses: Open-ended training courses that do not follow a set script (such as serious games or video games) with successes and failures automatically validated by ViSu. Here, validation is done visually at the instructor's discretion.

Working completely independently, the instructor/trainer will be able to:

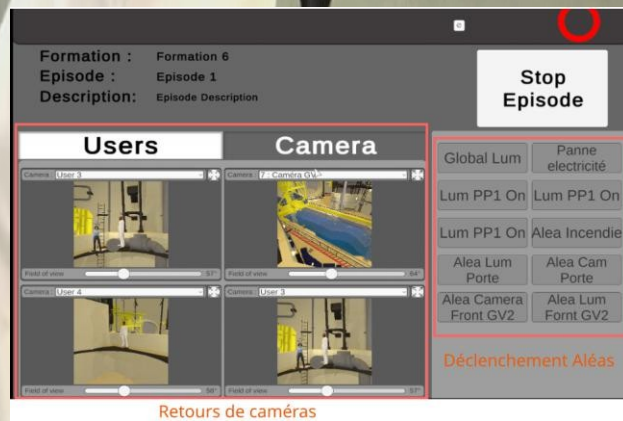
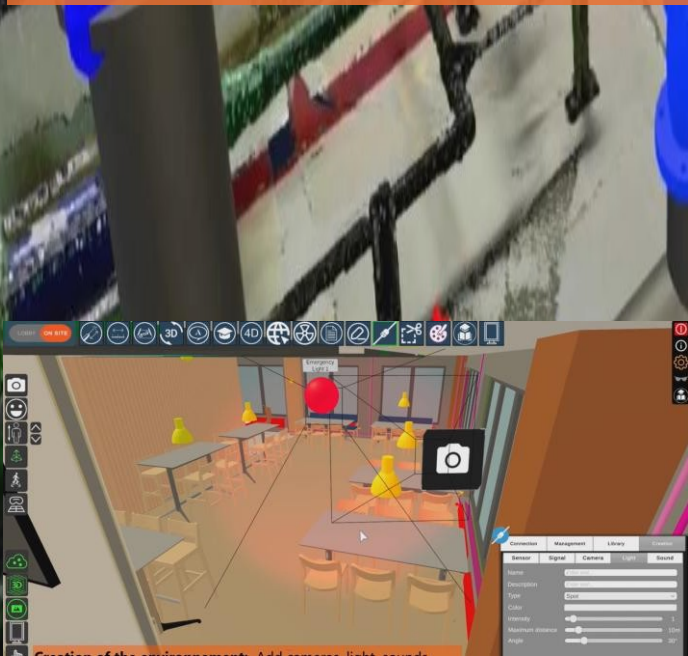
1. Create their own unscripted, step-by-step training sessions:

- Create the training environment
 - Create/arrange the 3D environment (point cloud, 3D model)
 - Create sound environments (engine noise, ventilation noise, fire alarm)
 - Create lighting environments (red safety light, spotlight, shading, spotlight on a remote-control arm, etc.)
 - Placement of virtual cameras (remote-operation cameras or surveillance cameras)
- Creation of the various training modules (e.g., Module 1: Removal of the central concrete slab
CHA-2, Episode 2: dismantling of the stacking plates, once the concrete slab has been removed)
- Creation of contingencies (fires, power outages, audible alarms, camera malfunctions) that can be triggered during the training

2. Launch a training session and supervise the learner(s) in solo or multi-player mode via a dedicated supervision interface:

- Be able to communicate with learners
- View their movements via supervision screens connected to virtual cameras
- Trigger scenarios—previously set up by the instructor—to challenge the participants (fire drill, power outage, etc.)
- Visually verify the learners' actions.

For more information, see the ViSu user guide, §4.3.4. Training



Stabilization of the "Connected Objects (API)" Module:

Stabilization of the "Connected Objects (API)" module:

Significant stabilization of the Connected Objects (API) module has been achieved.

As a reminder, the "Connected Objects (API)" module allows you to create interactive/controllable elements via external simulators. These elements can be likened to home automation devices.

These elements do not need to be connected to the simulator. They can be used exclusively within ViSu.

Various elements can be created:

- **Sensors:** This element is an IoT sensor that retrieves real-time values from actual sensors
- **Signal Button/Signal:** A signal used to trigger an action from an external simulator.
For example, the button sends a "Material Handling Bridge Animation" signal, and the simulator responds by sending real-time messages that animate the equipment.
- **Cameras:** Placement of virtual cameras (remote-control cameras or surveillance cameras)
- **Lights:** Creation of lighting environments (red safety light, spotlight, shading, spotlight on a , etc.)
- **Sound effects:** Creation of sound environments (engine noise, ventilation noise, fire alarm)

For more information, see the ViSu user guide, Section 4.3.5. External API Tablet

