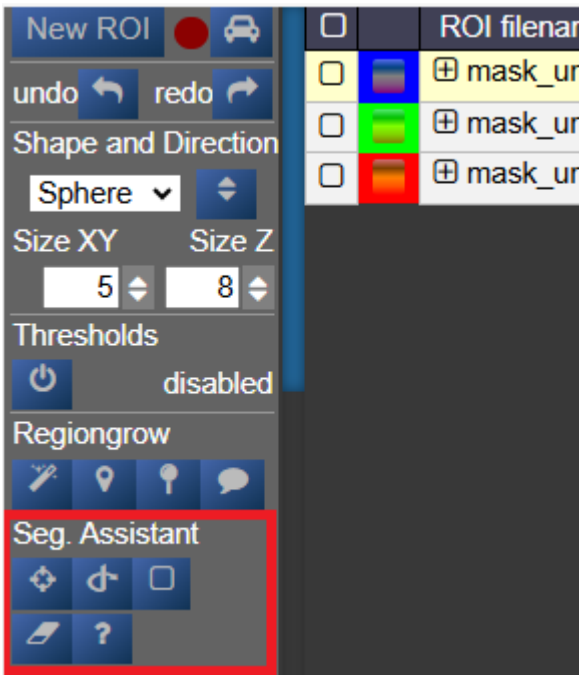


Segmentation Assistant for ROItool (nnInteractive)



This assistant allows users to create and refine 3D ROIs using interactions. Images, masks, and successive interactions are processed by a deep learning model hosted on a remote server.

The current version of the model is **nnInteractive** (Isensee, Rokuss, Krämer et. al., 2025).

[nnInteractive repository](#)

1. Usage

First, **select an ROI** from the ROI list to make it the active target for segmentation.

Point Interaction

- Click the **Point** icon (crosshairs) to activate Point mode
- **Left-click** on the image to add a **positive** point (to include an area)

- **Right-click** on the image to add a **negative** point (to exclude an area)
- The segmentation will be updated immediately. Click the icon again to deactivate
- To add multiple points before updating the segmentation, **hold down the Q key** while adding points. Release the Q key to send all accumulated points at once

Scribble Interaction

- Click the **Scribble** icon to activate Scribble mode and draw a scribble on the image
- Click the **+** button to run a **positive** interaction (add areas)
- Click the **-** button to run a **negative** interaction (remove areas)
- Scribbles are cleared after each interaction, allowing you to add more

BBox Interaction

- Click the **BBox** icon (square) to activate Bounding Box mode and draw a box on the image
- Click the **+** button for a **positive** interaction (segment inside the box)
- Click the **-** button for a **negative** interaction (exclude area in the box)
- The box is cleared after each interaction

Reset Interactions

- When editing the same ROI, all previous interactions are kept in memory server-side to guide the segmentation
- Click the **Reset** icon (eraser) to erase all previous interactions and start fresh

2. Server Setup

The segmentation server must be running, typically on a machine with a GPU. First, navigate to the `src/python/segmentation_assistant_server` directory and launch the `setup.sh` script (requires internet access):

bash

```
cd src/python/segmentation_assistant_server
./setup.sh
```

This will create a Python virtual environment and install the necessary dependencies.

Next, start the server from a computing node with:

bash

```
cd src/python/segmentation_assistant_server
./start.sh
```

3. Client Configuration

Once the server is running, it will log its port. You must update this client's configuration to point to that address.

Edit the file: `conf/segmentationserver.conf`

Set the `REMOTE_SEGMENTATION_BASE_URL` to the server's address, for example:

json

```
{"REMOTE_SEGMENTATION_BASE_URL": "http://<SERVER_IP>:PORT"}
```

Important: You must restart Nora for the changes to take effect.

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