SmartPath
User Manual

User manual for automatic multimodal histopathology whole slide imaging system

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1 Installation requirement

Micro-manager

- Install the latest version of Micro-Manager 2.0 gamma https://micro-manager.org/wiki/Version_2.0.
- Run Micro-Manager, select tools-options and check the box that says Run server on port 4827 (you only need to do this once).

OpenScan

- Install OpenScan with NIDAQ https://github.com/uw-loci/OpenScanLib.

SmartPath

- Clone Github repository https://github.com/uw-loci/smart-wsi-scanner.
  Right click a location and select "Git Bash here" and enter:
  `git clone https://github.com/uw-loci/smart-wsi-scanner.git`
  Press "Enter" key.
  Otherwise, download the code in zip file and unzip to a location.

- Create the Python environment follow the instructions on Github.

QuPath

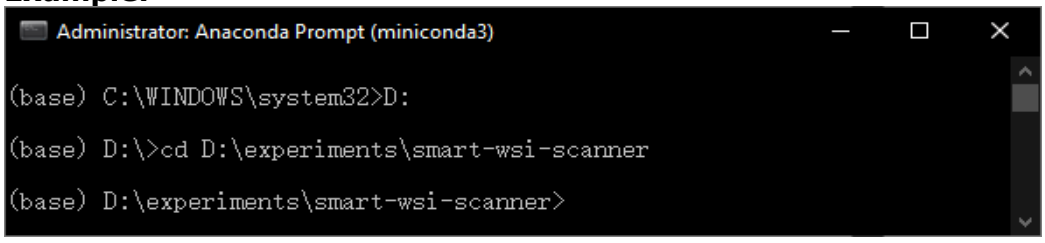
- Download the latest version of QuPath, choose the standalone zip file version, unzip the folder into the root directory of SmartPath code repository folder.

2 System startups

Run Micro-Manager 2.0 gamma, select tools-options and check the box that says Run server on port 4827 (you only need to do this once).

Run Anaconda Prompt as administrator.

In Anaconda Prompt, navigate to SmartPath code repository folder by entering:
`cd [SMART_PATH_ROOT_FOLDER]`
Press "Enter" key. If the folder is not located in the system drive, enter this command to switch drive before navigating to the folder:
`[DRIVE]:`
Press "Enter" key.
Example:



Activate SmartPath Python environment by entering:

```
conda activate smartpath
```

Press “Enter” key.
Example:

3 Acquisition configurations

4 Rapid pre-scan

5 Selective scan

6 Target detection model training

7 Run-time image enhancement model training