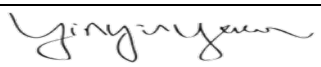
THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center
Making Cancer History®

Polyscope Standard Operating Procedure
Version: 1.0.0
Date: April 07, 2025

Version History

Version History			
Version No.	1.0.0	Current Version Date	April 04, 2025
Effective Date	April 07, 2025	Revision Date	N/A
Responsible Person	Pingjun Chen	Signature	
Writer	B. Leticia Rodriguez	Approval	Yinyin Yuan

Keyword Definitions

Keyword	Definition
SOP	standard operating procedure
ML	machine learning
WSI	whole slide image
URL	uniform resource locator
ETA	estimated time of addressing

Review Procedure
This standard operating procedure (SOP) will be reviewed and updated every half-year or as needed. Validation process will be followed, and feedback will be considered during the review.

Purpose
This SOP describes how the Polyscope team operate Polyscope at MD Anderson Cancer Center.

Scope
This SOP provides the description of Polyscope functionalities, defined team roles and responsibilities, and procedures to ensure operation consistency and quality.

Essential Business Function
Polyscope is a web application designed for digitized pathology slide image viewing, sharing, and annotation. It connects pathologists with data scientists who develop machine learning (ML) models for cancer diagnosis, prognosis, and more. Polyscope enables fast, seamless exploration of large whole-slide images (WSI) within a web browser through intuitive interface. Polyscope supports single-cell annotations and tissue segmentation, allowing users to collect data for ML model training and visualize results to evaluate model performance. Polyscope supports a wide range of image formats and enables slide sharing via a simple uniform resource locator (URL) link. By using Polyscope, the user can directly collaborate with its developers - a team of data scientists and pathologists - gaining first-hand access to their expertise. This direct collaboration fosters partnerships and facilitates publishing findings together, unlike other software developers who may lack specialized knowledge in cancer research. Compared with other software such as QuPath, Polyscope doesn't require installation or local storage on the user's end. It is accessible from nearly all modern web browsers, including those on mobile devices.

Roles and Responsibilities

Team member	Role/Responsibility
Yasin Shokrollahi	Core developer
Pingjun Chen	Admin support
B. Leticia Rodriguez	Admin support
Zhuohe (Harry) Liu	Documentation leader
Simon Castillo	Admin support backup

Procedures and Processes

<table>
<tr><td>Polyscope support communication for all current users</td><td>polyscope_support@mdanderson.org</td></tr>
<tr><td>Polyscope service and enhancement request</td><td>polyscope_admin@mdanderson.org</td></tr>
<tr><td>Communication for planned downtime</td><td>Once the date is confirmed, send initial notification to all users 2-3 days in advance, and followed by a 2nd notification 4 hours before the scheduled downtime.</td></tr>
<tr><td>Communication for unplanned downtime</td><td>ALERT – Immediate:
Send a notification informing users that an issue has been identified and is under investigation and provide an estimated time for resolution (ETA) if available. Follow the notification protocol by emailing polyscope_support@mdanderson.org for distribution to all users.
2nd ALERT – 4-Hour Mark:
Send an update with one of the following
• All-clear notification - issue resolved
• ETA notification - provide an ETA
• No ETA notification - acknowledge ongoing investigation with no ETA.
Ongoing Updates:
Continue providing daily updates until the issue is resolved.

Notification email format and guidelines
<table>
<tr><td>What:</td><td>This box describes what happened to the best of our ability and what we are currently doing about it. This is at a high level with modest detail. We shall not indicate possible root causes without confirmation first.</td></tr>
<tr><td>Who Is Affected:</td><td>This section should be reserved for the users of systems and the degree to which they are affected. i.e. "Magview users are experiencing slowness, but are still able to dictate reports"</td></tr>
<tr><td>When:</td><td>The first notification will include the time the first incident was reported. Subsequent update notifications will include the current time of the most current updated information.</td></tr>
<tr><td>Why:</td><td>If we know why, state it. If not, note as "Still under investigation"</td></tr>
<tr><td>Action Required:</td><td>This is action required on the customer's part; i.e. "Please logout of Radstation and back in...", or "Please reboot your Radstation to restore full functionality..." etc...</td></tr>
<tr><td>ETA:</td><td>Obviously, if there is an ETA, provide it. If not, "No ETA at this time.</td></tr>
</table>
</td></tr>
</table>

	The responsible party for sending out notifications should start with #1 and then proceed sequentially down the list for each member. Team member | Role Pingjun Chen | Yasin Shokrollahi | Zhuohe (Harry) Liu |
Unplanned downtime action plan	1-Issue received from polyscope_admin@mdanderson.org. 2-The admin investigates whether the issue is user-specific or platform-wide. 3-The admin develops a plan for investigation and resolution. 4-If the issue is platform-wide, the admin notifies all Polyscope users via polyscope_support@mdanderson.org. Besides, the admin provides status updates to all users every 24 hours until the issue is resolved. 5-If the issue is user-specific, the admin aims to resolve the concern within 1-3 days.

Downtime Email Template
Greetings, Polyscope users,

Please be advised of the upcoming Polyscope downtime:

What:	Polyscope update is scheduled to occur on ***DATE AND TIME***.
Who's affected:	Polyscope users
When:	***DATE AND TIME***
Why:	To be specified based on each occasion
Action required:	To be specified based on each occasion

Signature

Welcome Email Template

Welcome to Polyscope,

Explore the tutorials and documentation below to get started and familiarize yourself to polyscope:

Polyscope Tutorial v1.0.0.pptx

https://polyscope.mdanderson.org/docs/index.html

Any issues or additional request for enhancement, please email polyscope_admin@mdanderson.org

Signature

References

Polyscope Tutorial v1.0.0.pptx
https://polyscope.mdanderson.org/docs/index.html