

Cloud Storage Guide

Cloud Storage consists of a medical data API, object storage and a set of zero-footprint viewers that support all medical imaging modalities. Additional integrations are available for applying NLP to clinical reports, annotating medical images and videos, image sharing, and more.

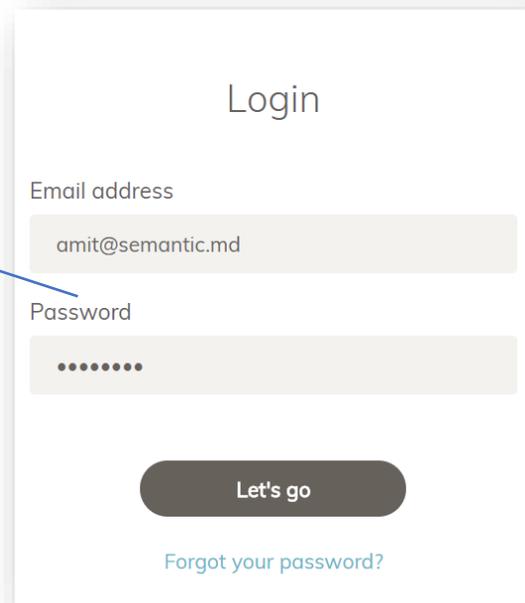
Getting Started

SemanticMD Cloud

Point your web browser to:

<https://app.semantic.md>

Sign in with your credentials.



Login

Email address
amit@semantic.md

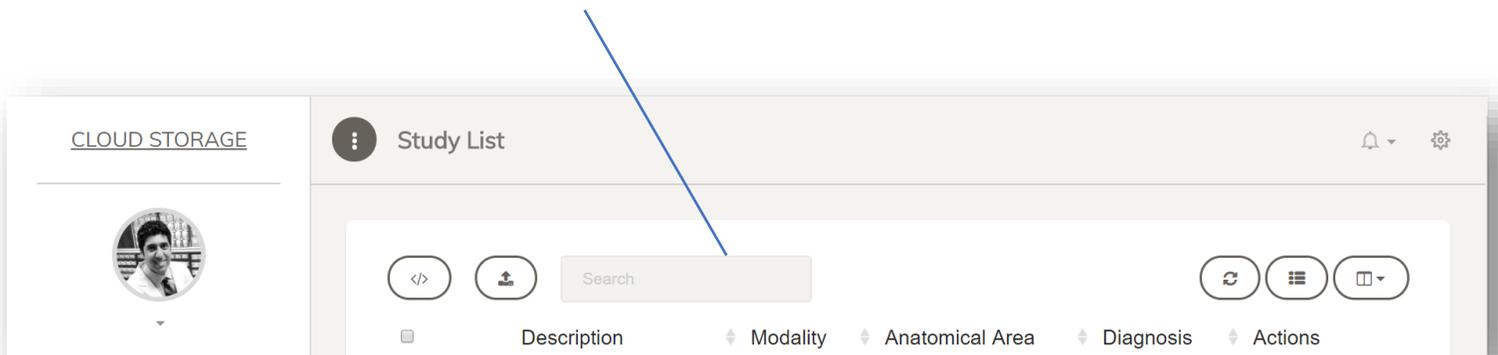
Password
.....

Let's go

[Forgot your password?](#)

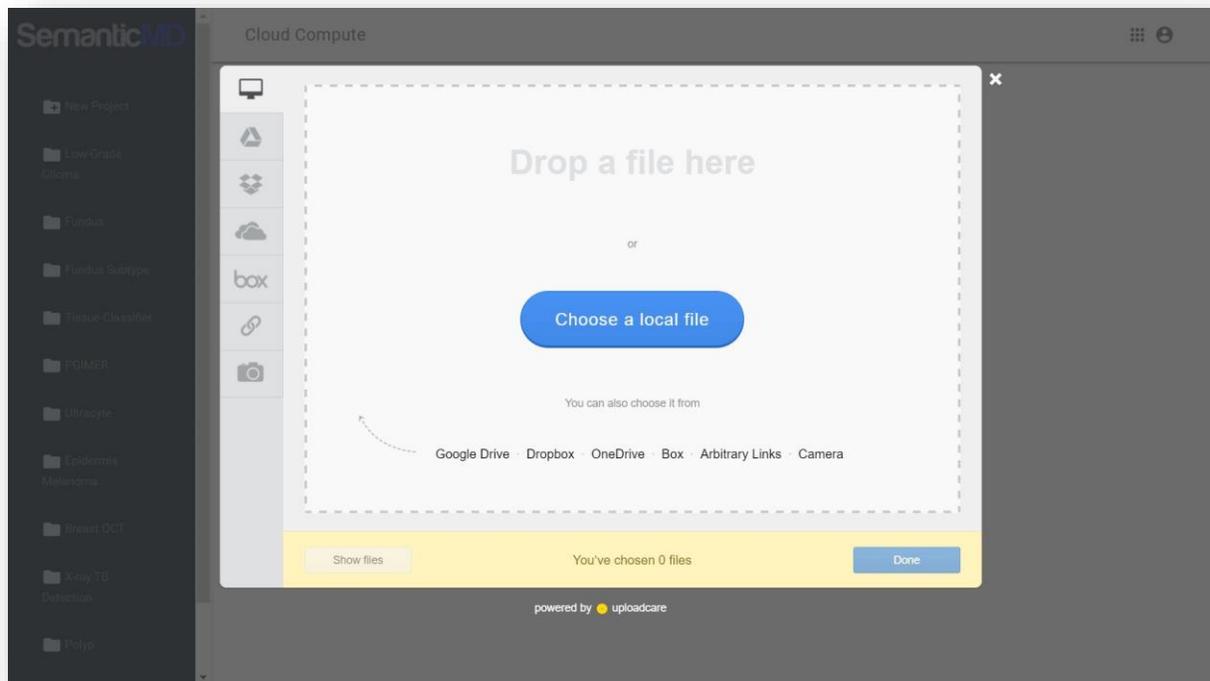
Study List

After logging in you will be taken to the Study List. You can search for studies using keywords across all available fields.



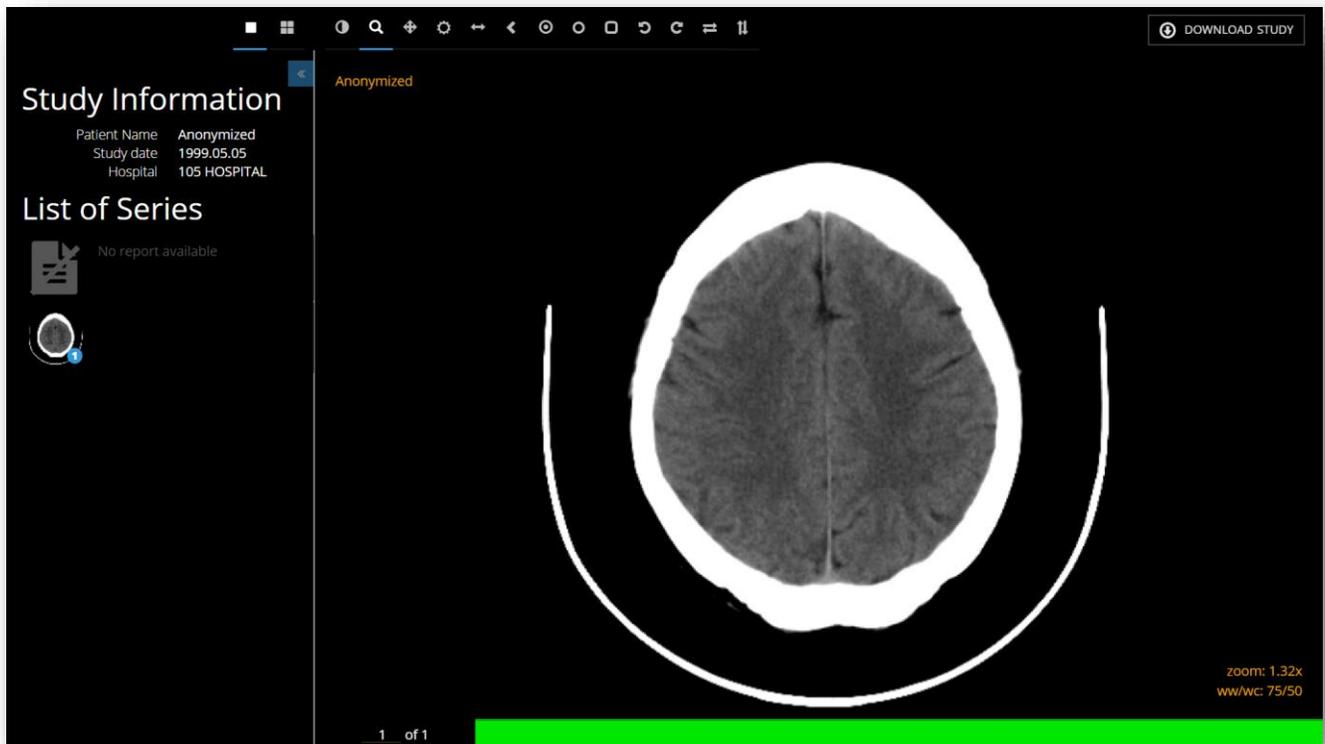
Uploading Studies

Due to the varying sizes and complexity of medical imaging data, we offer multiple ways to upload studies. For individual images (e.g. chest X-rays), the web-based uploader is fast and efficient. For large pathology images or multi-slice CT datasets, we recommend using [native client upload](#).



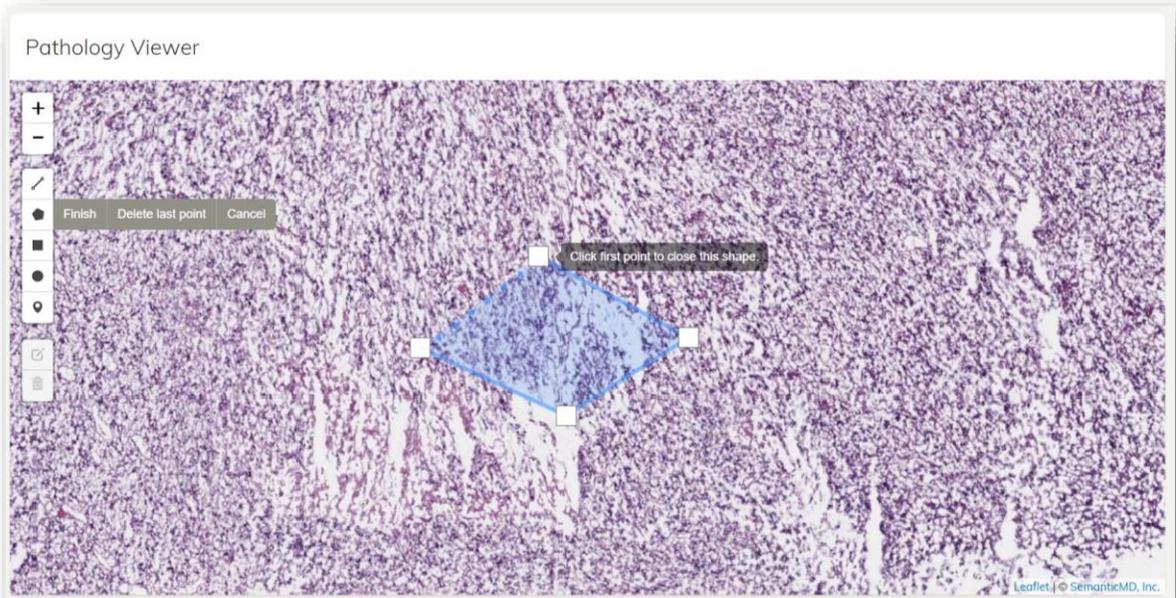
Viewing DICOM Images

We provide a lightweight, HTML5-based DICOM viewer for rapidly viewing and annotating DICOM data. Our viewer is CE-mark certified and available for diagnostic use.



Viewing Gigapixel Images

For all other imaging data, we provide a viewer and rich set of annotation tools capable of handling gigapixel resolution images of any format. Upload your favorite pathology slide or fundus camera image.



Analyzing Reports

After selecting studies, clicking the “NLP button” will automatically apply OCR to attached reports and extract clinical diagnoses (e.g. SNOMED) from the studies.

The screenshot displays the 'Study List' interface. At the top, there are two notification banners: 'Applying OCR to report...' and 'Extracting terms...'. Below these, a search bar contains the text 'ankle'. A blue arrow points from the text above to a code icon button in the top left of the table area. The table has columns for 'Description', 'Modality', 'Anatomical Area', 'Diagnosis', and 'Actions'. The 'Diagnosis' column contains colored tags representing extracted clinical terms.

Description	Modality	Anatomical Area	Diagnosis	Actions
<input type="checkbox"/> RT ANKLE	CT	-		
<input checked="" type="checkbox"/> RT ANKLE	DX	-	NORMAL	
<input checked="" type="checkbox"/> LT ANKLE	DX	-	AVULSION FRACTURE JOINT EFFUSION SOFT TISSUE SWELLING	
<input checked="" type="checkbox"/> ANKLE XRAY COMPLETE - L	CR	-	TWISTING LATERAL PAIN AVULSION FRACTURES NORMAL	
<input checked="" type="checkbox"/> ANKLE XRAY 2 VIEWS - L	CR	-	PAIN FRACTURE	
<input checked="" type="checkbox"/> ANKLE XRAY 2 VIEWS - L	SR	-	FRACTURE SOFT TISSUE SWELLING CALCANEAL SPUR OSTEOPEENIA	
<input checked="" type="checkbox"/> ANKLE XRAY 2 VIEWS - L	CR	-	SOFT TISSUE SWELLING FRACTURE FRACTURE OF THE DISTAL FIBULA	
<input checked="" type="checkbox"/> ANKLE XRAY 2 VIEWS - L	CR	-	FRACTURE	

Storage Backend

Our storage server can run on any cloud or local environment and can be integrated into your web applications. We also offer developer-friendly APIs to interact with the storage server.

API request:

```
curl -H 'X-APIKey: YOUR_API_KEY' -X POST -d "category=abnormal" -d "project=tb_detection" -d "customer=semanticmd" -d "tile=false" -d "image_urls[]=https://s3.amazonaws.com/semanticmd-public/dcm_test/IM-0001-0001.dcm" -d "image_urls[]=https://s3.amazonaws.com/semanticmd-public/dcm_test/IM-0001-0002.dcm" https://api.semantic.md/v1/upload
```

Data stack:



redis

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A Platform for Enterprise

Overview

Cloud Storage gives enterprises a single annotation platform to enable the rapid curation of imaging datasets across and beyond their organizations. It incorporates secure image transport, HIPAA compliance, and robust image annotation control to create customized workflows, but in a smart and governed way.

Configurable Deployment

We know that every enterprise has unique imaging data, reports, and patient populations. Cloud Storage can be configured to parse your report formats and image formats and integrate the outputs back into your own databases. We provide both cloud and on premise deployments where we optimize our code to fit your compute resources.

Extend with Governance

Cloud Storage comes integrated with an enterprise-focused clinical trial management platform, and we are partnered with a leading imaging core lab. This provides enterprises a single governance framework to allow for common security, manageability, and scalability. Through our partners we provide de-identification, long-term image storage, auditing and consulting for clinical trials.

About SemanticMD

SemanticMD is a leader in providing medical imaging analytics powered by deep learning. Its portfolio of products meets customers' growing needs from annotating data and self-service analytics to managed, embedded and custom image analysis solutions. Our customers rely on SemanticMD solutions to gain meaning out of medical imaging data from varied sources and exploring the hidden relationships within data that lead to diagnostics, workflow tools, and improved clinical outcomes.