

Canada's Capital University

Document version: 1.14 CoMaS version: 0.7.60 Document Release date 12-01-2024



Contents

Table of Contents

| <u>1.</u> | OVERVIEW | 2 |
|------------|------------------------------------|----|
| <u>2.</u> | REQUIREMENTS | 3 |
| <u>3.</u> | TECHNICAL ISSUES: | 4 |
| <u>4.</u> | HOW DOES COMAS WORK? | 5 |
| <u>5.</u> | INSTALLING COMAS ON WINDOWS PC | 7 |
| <u>6.</u> | INSTALLING COMAS ON MACOS | |
| <u>7.</u> | INSTALLING/RUNNING COMAS ON LINUX | 9 |
| <u>8.</u> | RUNNING COMAS ON MACOS AND WINDOWS | 10 |
| <u>9.</u> | THINGS TO NOT DO DURING THE EXAM. | 27 |
| <u>10.</u> | GOING FOR A BREAK | 28 |
| <u>11.</u> | STUDENT VERIFICATION | 29 |
| <u>12.</u> | TROUBLESHOOTING | 31 |
| <u>13.</u> | FAQ | 34 |
| <u>14.</u> | CONTACT US. | 34 |



1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

1. Overview

Why is academic integrity important? Academic integrity ensures fairness, and that our programs and degrees have value. If we were on campus, you would sit in the exam room, proctors would check your campus card, and you would sign on the designated signing sheet for your course. You would put your hand up if you had a question or needed to use the washroom. We need to translate these activities to the digital world. Please know that we are here to support you through this new process and answer any questions you might have about how the solution works. Our goal, from the beginning, was to provide flexible, modular solutions, and in doing this, we elected to use in-house applications to provide us with the ability to customize and incorporate feedback. This guide will outline the features and functions of the CoMaS platform, our automated proctoring solution.

The e-Proctoring application, CoMaS, ensures that only the approved examination materials are being used during the exam and that the normal rules during exams continue to be observed, such as not communicating with other people. You can find more details about what information is gathered in the "How CoMaS works" section.

Please review this document and follow the instructions to install CoMaS. Before the exam day, you will receive an email giving you all the information you need to install and sign into CoMaS. An activity will be created for your exam, and it will be available from the time you receive this email until the end of the exam.

It is **critical** to install and test the CoMaS application well in advance (at least **three business days**) to leave enough time for troubleshooting, which can be time-consuming. The goal is to make sure everything is functioning as expected on the day of the exam. If you encounter any technical issues or have any questions regarding this application or process, please submit an exam support ticket for e-Proctoring by clicking on the following link: <u>https://carleton.ca/ses/help</u> (please mention your course, operating system and version and include screenshots of the error if applicable). If you have any general questions or concerns about the e-proctoring of your exam, please contact your instructor.

2. Requirements

2.1 Hardware & Software Requirements:

- a) A computer running one of these operating systems (Tablets including Armbased Microsoft Surface are not supported as of now.)
 - i. Windows 10
 - ii. macOS 10.14+
 - iii. Linux Ubuntu 18.04
- b) Permission and access to download and install the application on your computer.
- c) Link to download the application and passcode to login (which will be sent to you by the e-Proctoring team only through onlineexams@cunet.carleton.ca)
- d) Internet connection
- e) If a webcam is necessary for your course, the webcam image will be displayed on the screen during the exam and overlaid, ensuring it is not obstructed by any other window. You can check the CoMaS folder on your desktop to ensure or check the images being captured.
 - i. Please note that Webcam is **mandatory** if you are writing remotely or approved by distance exam service to write exam remotely.
- f) An up-to-date version of a browser. Chrome, Firefox, and Safari, and Edge are supported.
- g) Computer should be kept awake for the whole duration of the exam (please change settings to prevent going to sleep or enabling a screensaver).
- h) On Mac computers permission should be granted to OS to share screen with CoMaS.

2.2 Examination Requirements:

- a) Make sure the taskbar (Windows) or dock (macOS) is visible and not hidden.
- b) Before the exam starts, ensure your computer has at least 2GB of free storage



1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

space (on the C drive for Windows users). This is necessary for CoMaS to create and store screenshot copies during the exam.

- c) If using multiple computers, CoMaS must be active on each one. However, it's enough to have the webcam functioning on just one of these computers.
- d) **Close** any irrelevant or unauthorized documents, applications, and webpages.
- e) Position your camera or webcam to clearly show both you and your desk.
- f) If a password is required to access the Brightspace exam, it will be provided 2 to 5 minutes before the exam begins. Remember, this only happens after you've successfully set up CoMaS.

3. Technical issues:

Should you run into any problems during the download, installation of the app, or getting the webcam operational, we recommend checking the <u>FAQ</u> section of this guide initially. If you still can't resolve the issue on your own, please feel free to reach out for help. You can request support by submitting an exam support ticket for e-Proctoring at <u>https://carleton.ca/ses/help</u>. Be sure to include details such as your course code, operating system, and its version, and attach screenshots of the error you're experiencing. <u>We are committed to addressing your technical concerns as quickly as possible</u>.

It's important to remember that testing CoMaS is required at least 3 Business days before your exam begins. This helps prevent any technical difficulties on the day of the exam. If you don't test CoMaS as instructed and face technical problems during the exam, please understand that no extra time will be given for the time used for troubleshooting the issue. For those who have tested COMAS in advance and still encounter issues, we'll do our best to fix them. If we can't resolve the issue, we'll offer an alternative solution and compensate for any time lost during the exam.

Based on the type of course or exam (in-person or online), having a camera might be essential for electronic proctoring. If you lack a webcam or if we're unable to fix any camera-related technical problems after you reach out to us, your instructor might offer different ways to take your exam. It's a good idea to talk to your instructor about other options. For students approved for distance exams, a webcam is non-negotiable. Before submitting your distance exam form, ensure you have a functioning device, reliable internet, and a **mandatory** webcam.



4. How does CoMaS Work?

CoMaS now offers two modes, based on your instructor's requirements. The Regular Mode is straightforward: simply launch CoMaS by double-clicking the app. In the Hybrid Mode, however, you must open CoMaS as an administrator. This is essential for students eligible and approved for by distance exam service to write exam remote or as specified by their instructors based on their course requirements.

Upon receiving your CoMaS invitation email, follow the link to download and install the application, adhering to the provided instructions. Remember, CoMaS remains inactive and doesn't collect any data unless you are running it. To ensure a smooth exam experience, install and log into CoMaS at least three days before your test to familiarize yourself with its functions. Depending on the mode specified in your invite (Regular or Hybrid), you'll either run CoMaS normally or as an administrator.

Once you've selected your server and clicked 'OK', you'll be directed to a sign-in page in your browser (Edge for Windows, Safari for Mac). After ID verification, first-time CoMaS users for a particular course will encounter a terms and agreement pop-up. Subsequently, CoMaS will go through various setup steps, displaying a progress bar. When ready, CoMaS begins capturing screenshots.

An HTML page will open in your browser, allowing you to manage your camera feed and access Brightspace or other authorized exam links. CoMaS stores data in a designated folder on your Desktop and transmits it to the server. Running CoMaS won't affect your computer's performance, enabling you to take the exam as usual.

Post-exam, exit CoMaS to end the session and stop data recording. You can then uninstall CoMaS and delete the folder from your Desktop if desired.

4.1 Examination Requirements:

CoMaS works only after you run the application, and it is successfully logged in. While running, CoMaS does these tasks:

- a) It randomly takes screenshots and transmits them securely to the server. It also stores this information locally on your computer in the CoMaS folder for your information.
- b) It records if a snapshot or file, inside the CoMaS folder, has been deleted or modified (this is forbidden to do while the application is running at the exam time. But after the exam, you can delete the whole CoMaS folder and uninstall the application if you like.



A note here is that if the application stops working during the exam and you need to run it again, it is fine to allow it to replace the folder and its content.

- c) It will record if you lose your Internet connectivity.
- d) If you have a document open or modify a document (pdf, doc, docx, txt, xls, xlsx, ppt, pptx, py, java, html, htm) while running CoMaS, it will record the name and path of that document and name of the application that opened or modified it. It will not look at the content of any file including the open ones.

Please remember that you are not allowed to open any documents except for those authorized by your course instructor.

- e) It does not look at any files on your computer that are not open.
- f) It does not record or look inside any of your files and documents (except for the files inside the CoMaS folder which are generated on the desktop each time you log in).
- g) It does not record any information from your browser history, cache, or cookies.
- h) It does not look at network traffic and does not probe devices with which you communicate.
- i) It does not record what applications you have installed. It records if an application modifies a document or if the application is visible on the screen, but without recording the content of any files.
- j) If you lose connectivity, CoMaS will still work in the background generating logs and screenshots until you close it. When the internet connection resumes, if CoMaS is still running, it will re-establish a connection and send all the information it gathered while it was working.

4.2 What Happens after the exam?

When the exam is finished, all the screenshots and webcam shots are put together on the Carleton-based secured server to create a video file. This video file, in addition to the activity logs, are then examined by authorized Scheduling and Examination Services staff. In summary, SES provides a report of all the data points to the course instructor, which includes: sign-in and sign-out time, open documents, if other webpages are open (from the screenshots), loss of connectivity, whether a student attempted a test-run or not successfully, if the webcam was used or worked at all, if a phone was used during the exam (from the camera feed), and lastly, if there was any



technical difficulty regarding CoMaS or Brightspace.

5. Installing CoMaS on Windows PC

Download CoMaS using the link that is sent to you by email. Make sure the email is from onlineexams@cunet.carleton.ca

- a) Locate the downloaded file on your device, double-click on it to run.
- b) You may receive a warning like the one below alerting that the publisher is unknown (An author signature is going to be available soon for this software, so you won't see this message anymore, please stay tuned). For now, please click on *More info* to see the *Run anyway* option and choose it.



- c) Allow the User Account Control pop-up to install the application.
- d) A window will open. Run the configurations and close. After installation is complete, you can see the CoMaS icon on your desktop.



6. Installing CoMaS on macOS

- a) Download CoMaS using the link that is sent to you by email.
- b) Locate the downloaded *.dmg* file on your device and double-click on it to run.
- c) The dialog below will pop up. Please double-click on *CoMaS Installer*.



- d) You will be prompted to confirm that you wish to install the *CoMaS Installer app*. Click Open.
- e) Complete the installation by clicking the Next buttons:





7. Installing/Running CoMaS on Linux

- a) Download CoMaS using the link that is sent to you by email.
- b) Locate the CoMaS_unix_0_7_60.sh file.
- c) Access the properties of this file. Add the Execute permission.
- d) Open a terminal window.
- e) Type "cd ~/Downloads (or anywhere you downloaded the file) to navigate.
- f) Type ./CoMaS_unix_0_7_60.sh
- g) Click the Next button to complete the installation.
- h) Double-click on the Desktop shortcut to run CoMaS.
- i) The sequence of operations is identical to those for macOS and Windows.

Please Note: Running CoMaS in a virtual machine or a docker container is not allowed and will be considered as an attempt to circumvent e-proctoring. This will result in an academic integrity case.



8. Running CoMaS on macOS and Windows

8.1 Regular CoMaS

- a) A few days before the exam, an email will be sent to you that contains all the information you need to install and log into a CoMaS session.
- b) Open the email with CoMaS login information. It will contain these items:

| •Link to download the software. |
|----------------------------------|
| Instructions |
| •Server name: |
| •Student Name: |
| •ID: |
| •Course: |
| •passcode = CASE SENSITIVE |

- c) It is critical to test CoMaS as soon as you receive this email to make sure everything is functioning correctly. After you receive the e-Proctoring Invitation email that contains all the login information, you can test it before the exam starts by following the steps shown here. You can use the same information to log into CoMaS on the day of the exam.
- d) If you have any technical problems, submit an exam support ticket for e-proctoring via <u>https://carleton.ca/ses/help.</u> (Please mention your course, operating system and version and include screenshots of the error).
- e) This is how to locate the app on MacOS: use spotlight to search for CoMaS or run/Applications/CoMaS/CoMaS. On Windows: use the Windows key to search for CoMaS or use the shortcut that is generated on the desktop. This has an orange icon.
- f) If you are currently connected to a VPN, kindly disconnect before proceeding.
- g) The First time you run CoMaS, it might take a couple of minutes to appear, so please give it time and avoid running it multiple times.
- *h)* Make sure you are not running an instance of CoMaS already. Do this by checking Task Manager.





1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

- i) The first time you run CoMaS (most likely on a Mac system) you may be asked to provide certain permissions.
 - ✤ If asked to allow CoMaS notifications, press Allow.
 - If asked to allow CoMaS to access your Desktop folder, press OK.
 - If asked, "Do you want the application to accept incoming connections", press Allow.
 - If asked, CoMaS would like to record this computer's screen, press Open System Preferences then check CoMaS, press Quit.
 - If asked, CoMaS would like to access the camera, press OK.
- j) If you receive a message from Windows Security Defender regarding running Java, allow access.



k) Run the application. Choose the server's name from dropdown list; e.g., *comas.cogerent.com.*



(This information is indicated in your invitation email).



I) A browser window will open in which you find that the *Course choice dialog* will appear, choose your course name from the dropdown list. Otherwise go to step 8.

| | Course: demo-exam ~ |
|--------|---------------------|
| First: | |
| Last: | |
| ID: | |
| | Sign In Quit |

Generated: Tue Oct 24 11:23:57 EDT 2023 using v0.8.27

m) Fill in your student information (make sure to use the exact name that was sent to you by email), and click on *Sign In*.

| | Course: dem | o-exam~ |
|--------|-------------|---------|
| First: | tom | |
| Last: | smith | |
| ID: | 1000000 | 02 |
| | Sign In | Quit |

Generated: Tue Oct 24 11:23:57 EDT 2023 using v0.8.27

n) Once the Activity choice dialog appears, Choose Exam from the dropdown.



Generated: Tue Oct 24 11:30:49 EDT 2023 using v0.8.27



o) Enter the passcode from the email and click **Continue**:



Generated: Tue Oct 24 11:30:49 EDT 2023 using v0.8.27

p) A new tab will open, and CoMaS will configure itself and you will see the progress. Please wait until it reaches 100%.



q) If you had logged into this session before -- for example, to do a dry-run test -- it might ask you if you want the folder to be rewritten. It is necessary to say **Yes** to that question which will remove the content of this folder.





r) If you make an error in inputting any of this information, you might receive this message:



And if the passcode is wrong, it will bring up the passcode dialog again. Please carefully doublecheck that you have input the exact first/last name and the correct ID that were sent to you in the email. Also check that you have selected the correct course and activity and use the correct passcode with no space afterwards.

s) Read the User Agreement and if you do agree click on Yes to authorize CoMaS to share your information. Even if you do not have a webcam, you can click on Yes and continue without a webcam. This message will close after 300 seconds if you do not answer it; CoMaS will then terminate. You only need to agree to this agreement once per exam.



Generated: Wed Oct 25 11:15:35 EDT 2023 using v0.8.27



1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

t) You will get a message which states some important information needed to properly setup your CoMaS.



 In MacOS, you need to allow CoMaS access to screen recording to share your screen. You can do this in your <u>System Preferences > Security & Privacy > Privacy ></u> <u>Screen Recording</u>. Check the option for CoMaS, check it. If it is already checked, uncheck, and check it again.

| General | FileVault Firewall Privacy | 28 |
|--------------------------|------------------------------|--------------------------|
| Accessibility | Allow the apps below to reco | ord the contents of your |
| Input Monitoring | screen, even while using oth | er apps. |
| Full Disk Access | a 🛋 a se | |
| Files and Folders | 19 million (19 | |
| Screen Recording | 16 a.e. | |
| Automation | CoMaS.app | |
| Developer Tools | | |
| Analytics & Improvements | | |
| Advertising | | |
| | | |

v) CoMaS will open a webpage in your default browser which will show the webcam feed and will ask you for ID verification. This might take a couple of minutes. Based on your browser's settings it might ask you to allow using Camera. If you didn't see any permission request from your browser or you cannot see your webcam image go to the



browser settings and allow camera or change the settings to always ask you for permission (change permissions for Camera on <u>Chrome, Safari</u> and <u>Edge</u>).



w) Please note that Webcam images are captured automatically by CoMaS.

The webcam image page in the browser should be open all the time during the exam for CoMaS to capture it as part of the screenshots.



x) Please try to position your webcam in a way that your face is completely visible, if that is possible. If you have a detachable camera, place it in a way (on the side of the table) that your desktop, face, and part of the screen is visible.

y) It is highly recommended to check if screenshots are being taken properly. Screen Shots are saved on a folder on your desktop.



"Desktop/CoMaS/(Examname)/(Activityname)/screens/..".

- On Mac computers, in case you can only see the CoMaS application in the screenshots and nothing else is being captured, go to Security>Security & Privacy>Privacy then Select "Screen Recording". If unchecked, check it. If it is checked, uncheck it, and then check it again.
- For your "ID" verification in CoMaS, you will have to place the student ID/ any government ID other than Health card close to the webcam as shown in the image below. Once verified successfully, Continue button will appear.



Generated: Mon Nov 13 14:23:45 EST 2023 using v0.8.27

- You can now start writing your exam.
- After you submit your exam, you should sign out of CoMaS. To do this, click on Quit on any of the CoMaS pages in the browser and then click on Confirm. Note that it may take a couple of minutes before the application ends; please be patient. A progress dialog is displayed during the shutdown process. When the application has closed, no further information will be captured from your device, and you can even uninstall the software if you like until the next exam.



Scheduling & Examination Services

1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca



| SELECT | SCENARIO DESCRIPTION |
|--------|----------------------|
| | Washroom Break |
| | Accomodated Break |
| | Personal Emergency |
| | Technical Issue |
| | Scanning Documents |
| | |
| | |

Generated: Wed Oct 25 11:59:36 EDT 2023 using v0.8.27





Session is now terminating. Please close all applications and save files



Generated: Wed Oct 25 12:00:32 EDT 2023 using v0.8.27

Session ending

Generated: Wed Oct 25 11:08:55 EDT 2023 using v0.8.27





8.2 Hybrid CoMaS

This mode is used if you are taking your exam is in Comas and this also used to make sure students only have access to the authorized websites (if any) for the duration of the exam. This restriction is temporary, and network access will be back once you are logged out of Comas.

- a) Please refer to the information above on how to download and install CoMas. If CoMaS is already installed on your computer, you'll need to uninstall it first, then use the link in the email to install the latest version.
- b) If you are currently connected to a *VPN*, kindly disconnect before proceeding.
- c) Once you've installed CoMaS, it's important to run the **app as an administrator** to ensure it functions correctly.

For windows OS Users: Right click on CoMaS App > administrator.

For MacOS Users: Run CoMaS and it will ask for your device Apple Password to run as admin.

d) After initiating the app as an administrator, select the appropriate server's name from the dropdown menu, for instance, *comas.cogerent.com*. The server's name can be found in your invitation email.



e) A browser window will open in which you find that the *Course choice dialog* will appear, choose your course name from the dropdown list.



1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

| | Course: demo-exam ~ |
|--------|---------------------|
| First: | |
| Last: | |
| ID: | |
| | Sign In Quit |

Generated: Tue Oct 24 11:23:57 EDT 2023 using v0.8.27

f) Fill in your student information (make sure to use the exact name that was sent to you by email), and click on *Sign In*.

| | Course: demo-exam ~ |
|--------|---------------------|
| First: | tom |
| Last: | smith |
| ID: | 10000002 |
| | Sign In Quit |

Generated: Tue Oct 24 11:23:57 EDT 2023 using v0.8.27

g) Once the Activity choice dialog appears, Choose Exam from the dropdown.



Generated: Tue Oct 24 11:30:49 EDT 2023 using v0.8.27

h) Enter the passcode from the email and click Continue:



Generated: Tue Oct 24 11:30:49 EDT 2023 using v0.8.27

i) A new tab will open, and CoMaS will configure itself and you will see the progress. Please wait until it reaches 100%.



j) If you had logged into this session before -- for example, to do a dry-run test -- it might ask you if you want the folder to be rewritten. It is necessary to say Yes to that question which will remove the content of this folder.





k) If you make an error in inputting any of this information, you might receive this message:



And if the passcode is wrong, it will bring up the passcode dialog again. Please carefully doublecheck that you have input the exact first/last name and the correct ID that were sent to you in the email. Also check that you have selected the correct course and activity and use the correct passcode with no space afterwards.

 Read the User Agreement and if you do agree click on Yes to authorize CoMaS to share your information. Even if you do not have a webcam, you can click on Yes and continue without a webcam. This message will close after 300 seconds if you do not answer it; CoMaS will then terminate. You only need to agree to this agreement once per exam.

| CoN acc upl be che sys use | MaS monitors the local file system for unauthorized ess to materials, takes screen shots periodically and nitors all network access. These screen shots are baded to the CoMaS server. Web cam access may also required in order for the activity to proceed. System cks are also performed in order to confirm that you tem meets requirements for e-proctoring. The end r license agreement can be found at <u>CoMaS EULA</u> . |
|--|--|
| If y | ou agree, press Yes and the session will continue. |
| If y | ou do not agree, press No and this session will end. |
| Thi: not | s session will be terminated in 300 seconds if you do hing. |

Generated: Wed Oct 25 11:15:35 EDT 2023 using v0.8.27



Scheduling & Examination Services

1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

m) You will get a message which states some important information needed to properly setup your CoMaS.



john smith (101010110): Started from instructor archive An explorer window will open showing the exam folder. Please save all of your work here. Please ensure that all unauthorized documents, webpages and applications are closed before you start. The event and log pages should open up in your default browser. Please make sure that your computer is not set to go to sleep during the exam as the webcam might stop working. Thank you. Scheduling and Examination Services Wed Oct 25 11:07:06 EDT 2023



Generated: Wed Oct 25 11:07:06 EDT 2023 using v0.8.27

- n) After clicking 'OK', your browser will open various webpages including CoMaS Event and CoMaS Activity, along with any other authorized websites, if relevant.
- o) A notification will pop up, asking for your approval to set up the IP on your device. It's **important** to choose 'Yes' for this step.





p) For the following pop-up, also select 'Yes.'



- q) If your exam is in Brightspace or any other website, please login to Brightspace or other website and search for your course and navigate to the exam. The following set of instructions (s-w) are for students whose exam is being written in CoMas
- r) Webcam will be required for approved distance learners or those writing remotely, This will open in a webcam page in your browser. Please make sure your browser has permission to use the webcam.
- s) When students take an exam directly from CoMaS, a window will appear in File Explorer or Finder and a Comas Exam webpage will also open up. Here, you'll see the exam questions, likely in a Word/Excel document. Please don't try to delete or move this file. Your completed exam will save automatically in this folder. Remember to save your work frequently. Don't worry, your answers are securely stored on the CoMaS server. Ensure you write and save all your responses in these files.



Scheduling & Examination Services

1125 Colonel By Drive Ottawa, ON, K1S 5B6 onlineexams@carleton.ca

| R DC > Windows SSD (C) > Un | us a laich a AsseDate a Lacal | Tomo : EENOVE : DIST | Encontion Dama + Europ + minut | | - |
|-----------------------------|-------------------------------|----------------------|--------------------------------|-----|------------|
| lame | Date modified | Type S | ize | v 0 | Searchexam |
| .comas | 2023-05-30 7:54 PM | COMAS File | 1 KB | | |
| Student Response File | 2023-05-30 3:58 PM | Microsoft Word D., | 12 KB | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

t) You can also access your exam file through activity webpage, by clicking on the Exam button.

| CoMaS Commands | |
|-------------------------------------|--------------------------------------|
| Command | Description |
| Activity: BUSI-Encryption-Demo/Exam | |
| Context | Display session context |
| Report | Display session mode report |
| Summary | Display session summary report |
| Logs | Display session logs |
| Exam | Display exam questions |
| Tools | Display available session tools |
| Alerts | Display session administrator alerts |
| Control: BUSI-Encryption-Demo/Exam | |
| Quit | Quit the current session |

- u) After starting your exam, please make sure that you **keep saving the file regularly** from time to time.
- v) It is very important that you do not move these file locations to anywhere else on PC/laptop or save them locally on your device.



w) Upon finishing your examination, ensure to save your files and once saved you can also click on the upload button in the exam webpage.



x) After you submit your exam, you should sign out of CoMaS. To do this, quit MS word/Excel first and click on **Quit** on any of the CoMaS pages in the browser and then click on **Confirm**. Note that it may take a couple of minutes before the application ends; please be patient. A progress dialog is displayed during the shutdown process. When the application has closed, no further information will be captured from your device, and you can even uninstall the software if you like until the next exam.



| SELECT | SCENARIO DESCRIPTION |
|--------|----------------------|
| | Washroom Break |
| | Accomodated Break |
| | Personal Emergency |
| | Technical Issue |
| | Scanning Documents |
| D | |
| | |





9. Things to not do during the exam.

When the exam starts, your computer and your workspace will be considered an exam environment, like the face-to-face examinations.

- a) Do not open or leave open any applications, documents, and webpages that are not allowed to be used or not necessary for writing the exam. Make sure you close all of them when you start to write your exam (even if they are not relevant to the course material). This includes messaging and email applications. It is important to turn off any pop-up notifications as well.
- b) Do not use your phone or any other electronic devices such as headphones, unless allowed or required by your course instructor.
- c) Do not change or delete any files inside the CoMaS folder on your desktop. One note is that if CoMaS crashes during the exam and you must run it again, it is ok to accept the request to overwrite the files.
- d) Do not close the CoMaS application until the exam has been submitted.
- e) If you notice CoMaS has crashed or closed by itself, start CoMaS again and it

UNIVERSITY Canada's Capital University

is ok to accept the request to overwrite the files. If you notice only at the end of your exam that CoMaS had stopped working, let us know by submitting an exam support ticket request via <u>https://carleton.ca/ses/help</u> (please mention your course, operating system and version and include screenshots of the error). We will pass this information on to your course instructor.

- f) CoMaS will continue working even if your internet is disconnected, so do not close the application if you experience a disconnection. CoMaS will reestablish connection as soon as the internet connection is restored.
- g) Do not communicate with anyone during the exam, either in-person or digitally.

10. Going for a Break

- a) During the exam you may be required to leave the examination space, for a washroom break, academic requirement, PMC accommodation or personal emergency. You do not have to message a proctor when you wish to go on a break, CoMaS allows you to self-declare a break via the web interface. Here are the steps you need to take to do that.
- b) Go to the webcam tab which opens at the launch of CoMaS. Select the break that best describes your situation by clicking the corresponding checkbox. Alternatively, if none of the default breaks are appropriate, you may write a brief description in the blank text fields provided and check the corresponding checkbox.

| LECT | SCENARIO DESCRIPTION |
|------|----------------------|
| 0 | Washroom Break |
| 0 | Accommodated Break |
| כ | Personal Emergency |
| 0 | Technical Issue |
| 0 | Scanning Documents |
| 0 | |
| | |

c) After you have selected or typed in the reason for your break, please click OK to the pop-alert. Please make sure that you **uncheck the checkbox** when you return to ensure your break duration is accurately reflected in the CoMaS report.



11. Student Verification

CoMaS has introduced a new feature for ID detection. Before v0.7.15, ID verification was performed by human identification of student faces in screenshots and movies. With the help of the CoMaS ID detection feature, we have automated the validation of student identity number (i.e., Carleton Student ID).

a) When you have a valid Carleton issued identity card.

Step 1: After login into the CoMaS, you are prompted to hold up your student card to the webcam on the browser tab of webcam.



Generated: Mon Nov 13 14:23:45 EST 2023 using v0.8.27

Step 2: You should press the "Save ID" button to take a snapshot of the card. The card should fill the webcam field of view.



Generated: Mon Nov 13 14:23:45 EST 2023 using v0.8.27

Step 3: Your ID will be verified when you get a green tick in Save ID. Once your ID is verified click on Continue.



Generated: Mon Nov 13 14:23:45 EST 2023 using v0.8.27

b) When you have NO valid Carleton issued identity card.

In case you do not have a Carleton issued student ID card, then please show any Government issued photo ID to the webcam and do not worry, a proctor will check and verify your ID from the captured screenshots.

12. Troubleshooting

12.1 General issues running or installing CoMaS.

Troubleshooting CoMaS Installation or Operation Problems. Please follow these steps sequentially

- a) Verify your login details, ensuring they match precisely with those provided in your email.
- b) Close any active CoMaS processes using Task Manager
- c) Remove the CoMaS folder from your desktop and attempt to run the program again.
- d) If the problem continues, please uninstall and reinstall CoMaS as per the guidelines in this manual.
- e) For further assistance, reach out to us at <u>https://carleton.ca/ses/help</u>. Remember to include details about your course, operating system, and screenshots of the issue you're encountering.

12. 2 What happens if my technical issue is not fixed in time?

We're committed to addressing any concerns you raise, and usually, we can resolve them. However, due to the variety of operating systems and configurations, some issues might not be resolved promptly. That's why it's important to download CoMaS at least three days before your exam, giving us enough time to tackle any problems.

If we can't fix the issue in time and your exam is approaching, Please submit an exam support ticket for e-Proctoring via <u>https://carleton.ca/ses/help.</u> (*Please mention your course, operating system and version and include screenshots of the error*). We'll work with you and your course instructor to explore alternative options. We'll inform your instructor about the technical issue you've faced, and the steps taken to address it. We also recommend that you personally update your course instructor on the specifics of the problem you encountered.

12.3 My screenshots do not capture the screen properly on a Mac computer.

If you're using a Mac and having trouble with screenshots where only the CoMaS app appears and nothing else, try adjusting your settings. Go to Security & Privacy under the Security tab, and then to Privacy. Here, look for "Screen Recording". If



it's not checked, go ahead, and check it. If it's already checked, uncheck it first and then recheck it. This should help resolve the issue.

12.4 My webcam is not working when I click on start webcam.

Go to your browser settings and permit CoMaS server to access your Camera. To see how to change permissions for the Camera on <u>Chrome</u> or <u>Safari</u>, <u>Firefox</u>, and <u>Edge</u> visit the links. No other application should be using the webcam, or it can't access the device.

12.5 The webcam page did not open or was closed. How can I open it again?

This page is called webcam.html and is in the CoMaS folder on your Desktop. It might take a few minutes before CoMaS generates and puts this file inside the Desktop/CoMaS/(exam_name)/(Activity name)/tools folder and open the webcam.html for you. If your browser is not set as default application to open html files then it might not open or might be open by another application, so you would need to open it yourself by going to this location and open webcam.html with the supported browser.

12.6 Cannot install CoMaS, run the downloaded CoMaS installation package?

This might be a compatibility case for windows users.

- a) First approach: Look up 'CoMaS' using the search feature in Windows. Once you find it, right-click and select 'Open file location'. Then, rightclick again and choose to 'Run as administrator.'
- b) Second approach: begin by searching for it in the Windows search bar. After locating it, right-click and select 'Open file location'. Then, right-click on the CoMaS file and choose 'Troubleshoot compatibility'. This action will trigger a pop-up window. Once the compatibility troubleshooter completes its analysis and suggests optimal settings for CoMaS, a new window will appear. At this stage, click on 'Test the program' to initiate the installation process. Follow the subsequent prompts to complete the installation.



12.7 When running the application, CoMaS reports it cannot access files and closes.

CoMaS must replace the files inside the CoMaS folder each time you run it. If any of the files or folder are in use or CoMaS is restricted from accessing that folder, it cannot run. So, if this issue happens for you, make sure you delete this folder before running the application. If you cannot, check Task Manager to see if any instances of CoMaS are running and using files in this folder.

12.8 When running the application, CoMaS says it cannot find a Java file.

Check the CoMaS folder and look for a file with java extension like CoMaS-x.x.x.jar, it should be about 13MB of size, if not delete it and run CoMaS again, if it still can't download this file completely, contact us and we work to resolve this issue.

13. FAQ and Instructional Vidoes

Please use the link below to find our FAQs, how-to videos, and privacy FAQs. <u>https://carleton.ca/ses/online-exams/e-proctoring/</u>

14. Contact Us.

- a) For troubleshooting installation and running CoMaS before/during exam.
 - Submit an exam support ticket for e-Proctoring: <u>https://carleton.ca/ses/help</u>.

Please include your course, operating system (including version), and attach screenshots of the error.

- b) For any urgent issue during exam.
 - Exam-related emergency toll-free call line: <u>1-877-557-2930 (Canada & USA)</u>.
 - o Outside Canada/US exam emergency: +1-613-518-2601.
 - Exam Support: Monday-Friday 8:30am-4:30pm (Eastern Time).
- c) For non-urgent exam related issues:
 - o <u>Submit an exam support request</u>: <u>https://carleton.ca/ses/help</u>.
 - Email: OnlineExams@carleton.ca.
 - Non-emergency phone call: 613-520-2600 x1571 M-F, 8:30am-4:30pm (Eastern Time).