What is ProctorTrack?
ProctorTrack (Verificent Inc.) is a remote proctoring system, where students must “activate” ProctorTrack before they take an exam. When this is activated, it will turn on the students webcam and force them to have a microphone on. It will record the student during the exam, as well as take periodic (every few seconds) screen-captures of their computer monitor. ProctorTrack’s AI system then analyzes the video output for any infractions that it deems happened during the exam. ProctorTrack itself does not determine if an infraction is cheating, it just allows the instructor to go back in and make that decision for themselves.

Once an exam is complete, the instructor can look up all of the students who took the exam, and go back individually through all of them. ProctorTrack will also flag the ones that have “failed” in that there was an infraction that it noticed, and the instructor can go in to try to verify what happened. While this is not the best scenario or environment for exams, it does a fair amount to try to deter cheating.

Exam Format
This document will outline the process needed to set up ProctorTrack for use in online math exams. The parameters of these exams are:

- Part of the exam is done on Canvas with text input into a quiz
- Part of the exam is written-response (show all work) questions that will need to be uploaded after the exam is complete
- Exams are open note and open book
- Students will be given access to particular websites in order to access notes/book related materials if they do not have them
- Students will be given access to a calculator in the quiz, and will also be able to use their physical calculators if they have them

Enabling ProctorTrack
Instructors first need to enable ProctorTrack on their course site for this to work. This is done by going into the desired course, going to the Settings tab, and then clicking Navigation at the top of the page. Then, scroll down to ProctorTrack (which will be somewhere in the list), click on the 3 dots and select Enable. This will put ProctorTrack as one of the available tabs on the side of the Canvas site.
Onboarding

The first part of the ProctorTrack process is Onboarding. This is where students validate their accounts with ProctorTrack as well as install the necessary software on their computer. This is a mandatory first step and should be completed by every student at least two days before the first exam. If they have already used ProctorTrack in a different class, they will likely not need to complete this process.

To set this up on the instructor end, you need to make a Canvas Quiz in your course that will exclusively be used for Onboarding. You can include questions to make sure that students can see all of the different types of exam questions you will give them on the exam, but you do not have to. Once you have made this quiz, you can set it up for Onboarding. To do so, click on the ProctorTrack label on the side of your Canvas page. That should give you a screen that looks like
If you do not see your quiz there, click on “Sync Tests” at the top of the page to refresh the list. Once you see the test you are looking for, go down to that row, click on “Select Status” and change it to “Onboarding ON.” For the Onboarding quiz, you can leave everything else as is. You should then encourage your students to take this quiz as soon as possible. The process can take 4-6 hours to validate (after they complete the quiz, which should only take a few minutes), so they should do this at least two days before the exam.

Exam Settings
After you have written your exam in Canvas (which needs to be set up as a Canvas quiz) you can then enable ProctorTrack for the exam. To do so, go back into ProctorTrack via the label on the side of the Canvas site and click Sync Tests again to make sure your exam is there. Once it is, click Select Status again, and now select “Proctoring ON.” Once you do that, you’ll want to click on the three dots to the right of that box, and click on “Go To Configuration”
In this menu, you’ll need to set what parameters are allowed for the exam. My recommendations are the following:

### Identity Verification Settings:

- Require Face Scan
- Require Photo ID Scan
- Do not require Room scan or Knuckle scan.

### Test Settings (these are the things that should be blue/enabled):

- Alloy Physical Books
- Allow Handwritten Notes
- Allow Earphones
- Allow Food and Drinks
- Prohibit Copy/Paste
- Prohibit Print Screen
- Prohibit Printing
- Desktop Monitoring
- Prohibit Multiple Monitors
- Allow Physical Calculator
- Allow Screen Calculator
- Hide Access Code/Password

Note that Allow Online Resources is disabled. This is because this would allow for full access to the internet, not just specified sites. If you have specific sites you want to allow students to access, you can do so using the Whitelist Url/Apps tab.

The important thing is to include all of the sites that you want students to be able to access in the Whitelisted URLs list on the left side of this page. In the image, I have sites.math.rutgers.edu and sites.rutgers.edu, because that is where the online resources I wanted them to be able to access are located. I also planned (and thought I put on there) desmos.com as an open site, because that would allow them to access the scientific calculator through that site.

Once all this is setup, you can save the settings via the three line button at the top of the ProctorTrack page so that you can easily set other exams to the same settings. At this point, the exam is good to go, and will run using ProctorTrack.

Reviewing Results
After the exam, you’ll need to go through and look through the recordings and make sure that all of the students adhered to the parameters of the exam. To do so, go back to the ProctorTrack window, go the appropriate exam, and click on View Sessions.
In there, your screen should look something like this.

The white boxes on this image will contain images of your students and their names. The status column indicates how ProctorTrack’s algorithm processed the exam. The red X indicates a failure, i.e., it thinks the student did something that was well outside the bounds of the exam and needs to be looked at. The yellow question mark means that it was questionable; there were some things that may have been a bit off, but on the whole was probably fine. The green check mark means that ProctorTrack did not flag anything as wrong throughout the exam. The red number on the right side of the row notes how many issues ProctorTrack found in the course of the video.
After this happens, it is the responsibility of the instructor to go through all of the sessions (at least the one that had flags) to make sure that something actually happened. On the whole, I haven’t seen any merit to these flags that have showed up. Most of the flags seem to be things that are not really issues, and it doesn’t catch a lot of the things that it could, mainly because we are allowing paper notes. It’s possible for someone to have an extra device off camera and use it while they are writing things down, and there’s no way to catch that. With this, you want to make sure that nothing significant happened during the exam, or make sure that these flags are actually legitimate. It, at times, has flagged people for “leaving the room” when they just turned to the side to work on their desk, or for using an online aid that was specifically allowed on the exam.

After going through all of these to make sure that nothing bad happened during the exam, or that the flags were all inconsequential, then you are done with this part, and can assign grades like normal through the Canvas quiz/file upload.