TestOut®

Canvas Integration Guide

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CONFIGURING CANVAS TO INTEGRATE WITH LABSIM

This guide was made for the LMS Administrator or individual experienced at configuring their LMS systems and settings.

To help you better integrate LabSim with your Canvas LMS, we have produced the following guide to walk you through the steps of how to link to a course, a specific resource within a course, and how to send a score back from a LabSim resource to Canvas's gradebook.

At the end of the guide, we will explain some of the common errors you may run into when trying to connect to LabSim through Canvas. Please be advised, we are not Canvas (or LMS) experts.

We are unable to provide support or set up your Canvas LMS. TestOut Technical Support is willing to let you know if there are any issues on our end with the LMS integration, but do not currently have the resources to set up a Canvas account.

As always, feel free to contact us with any issues.

SETTING UP TESTOUT EXTERNAL APP

As an admin, at your school level, navigate to the *Settings* section and the *Apps* tab.

If you are directed to the App Center Page, select *View App Configurations*.

Select *Add App* on the External Apps page.

In the *Add App* box, insert a name for this External Tool that distinguishes that this tool is for LabSim.

Insert your school's Consumer Key and Secret received from your TestOut Account Executive.

Insert http://www.testout.com/orbispartner/basiclti.aspx into the URL box *(You can also use https://www.testout.com/orbispartner/basiclti.aspx if your LMS requires it)*.

Insert www.testout.com in the *Domain* field.

In the *Privacy* box, you select *Public (We recommend selecting "Public" as it gives LabSim access to user information necessary to create a LabSim account)*.

In the *Custom Fields* box, you may input any global parameters for this app *(Multiple custom parameters are outlined in the* TestOut LTI Technical Document, *such as the parameter below, which automatically creates classes based on your classes in Canvas)*.

Click *Submit*.

CREATING A LINK TO LABSIM

You may use your created LabSim External Tool to provide your students with a Single-Sign-On option or to link to specific resources inside of LabSim and request a grade back.

Creating Single-Sign-On Link to LabSim

Inside of your course, navigate to the *Assignments* Page and click on the + *Assignment* button.
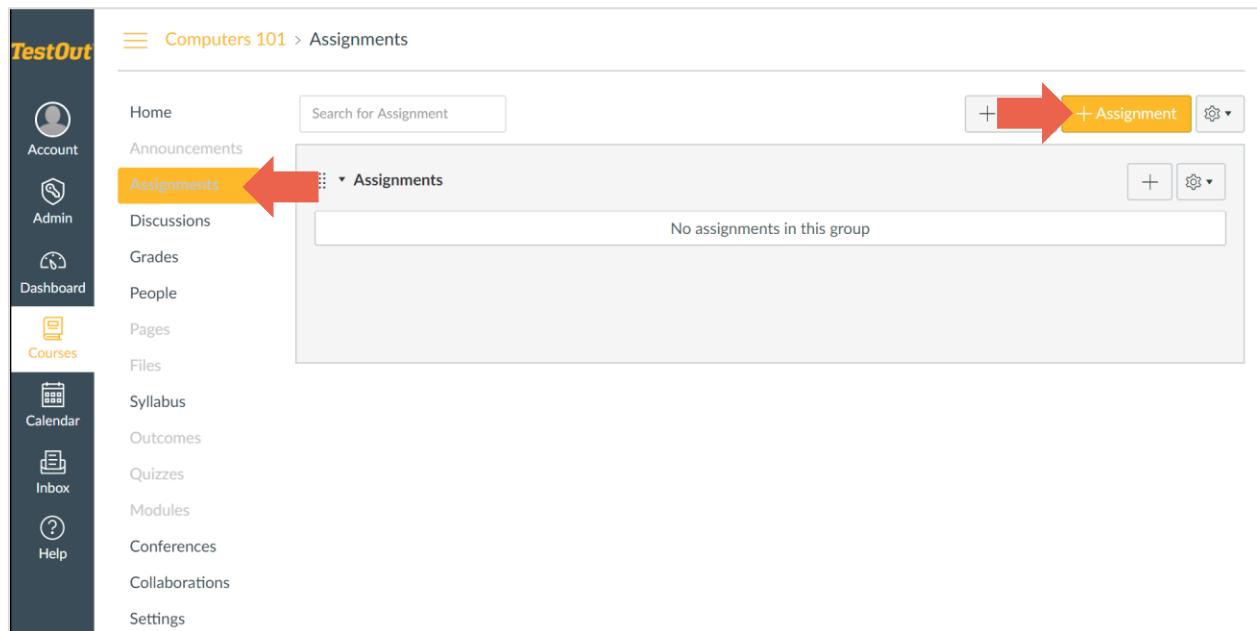
Give the assignment a name and description (if desired).

In the *Submission Type* drop down, select *External Tool* and then press *Find*.
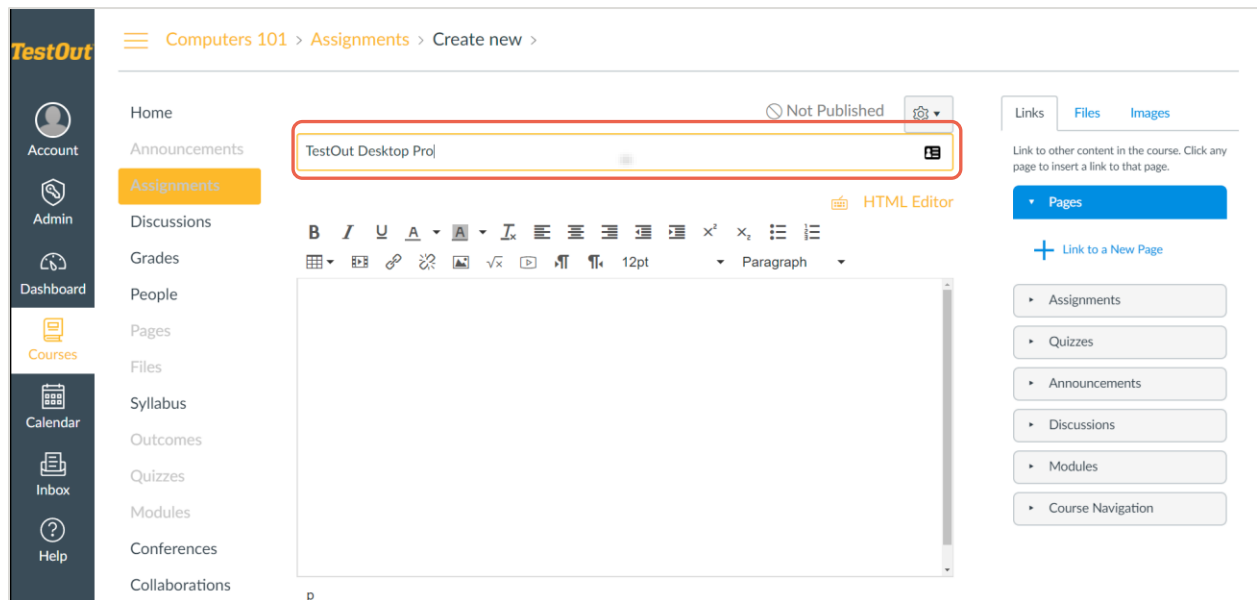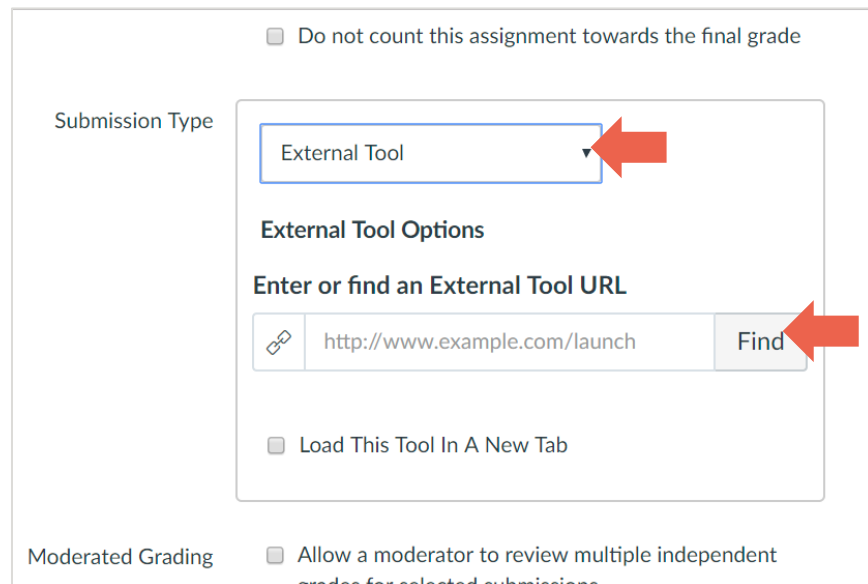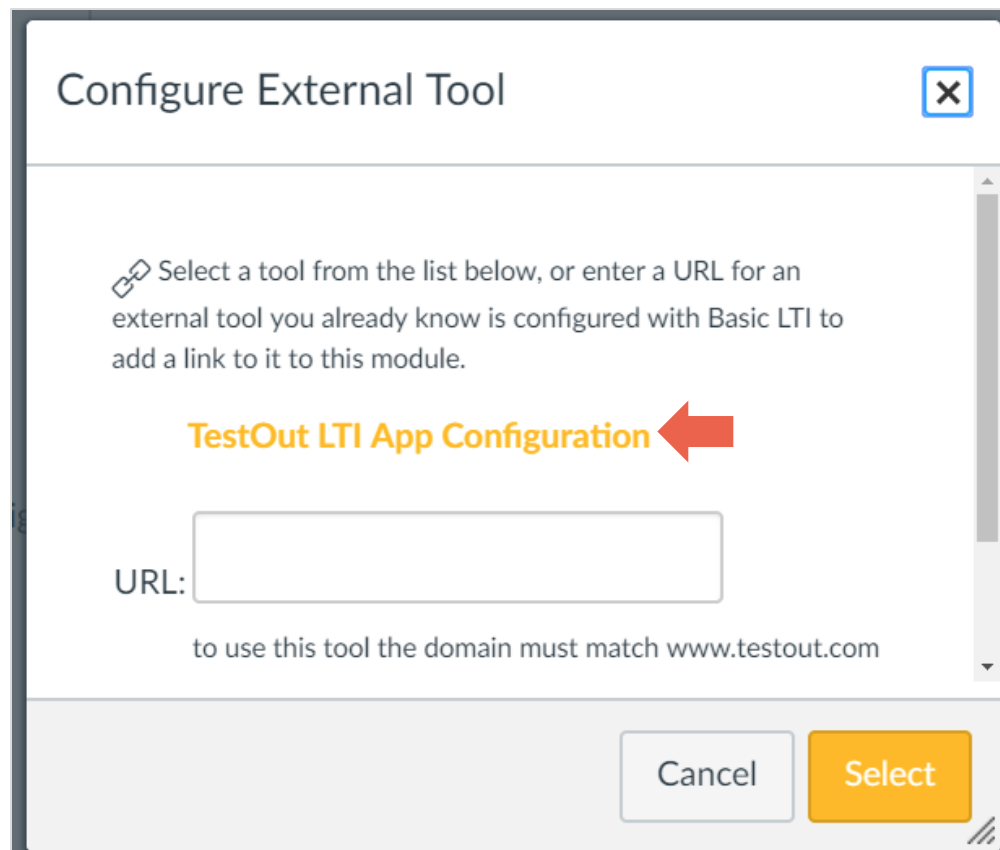

Select the external tool that you want to use to create an assignment link.

In this case, select the External Tool that you created to connect to LabSim.

Once selecting the tool, it will populate the base URL you need to link to LabSim.

You must add the custom parameter to the URL populated by the External Tool to determine the LabSim course you wish to access.

Do this by adding ? on to the end of the URL and then adding *labsim_course_id=* and your course ISBN number.

As this link is just for Single-Sign-On, there is nothing else we need to add to the URL.

After completing this, press *Select*.

Scroll to the bottom and press *Save & Publish*.

If configured correctly, you will be taken to this landing page where it tells you which course you will connect to.

Press *Launch TestOut*.

You will be taken to the last place you visited in your LabSim course.

Linking to a Specific LabSim Resource (with Grade Reporting)

Inside of your course, navigate to the *Assignments* page and click on the *+ Assignment* button.

Give your assignment a name based on the LabSim resource you are linking to.
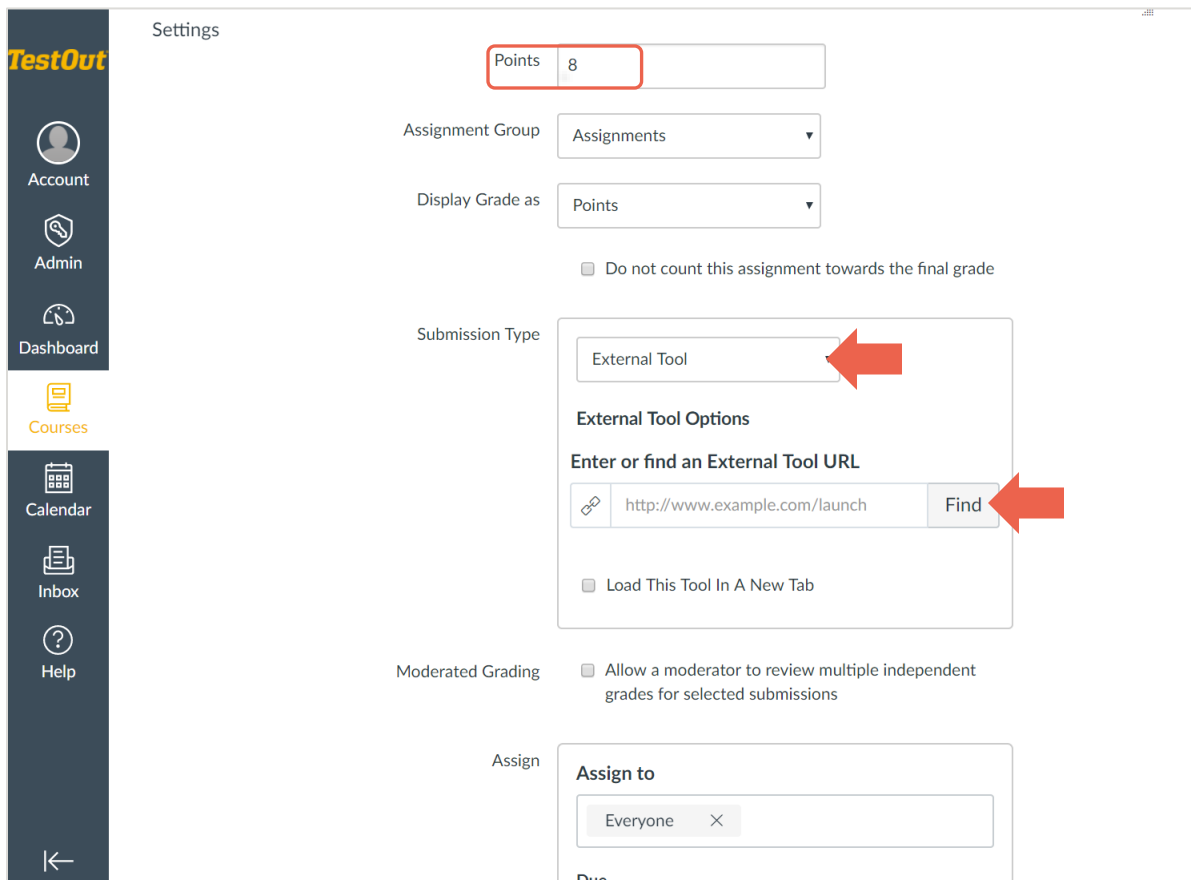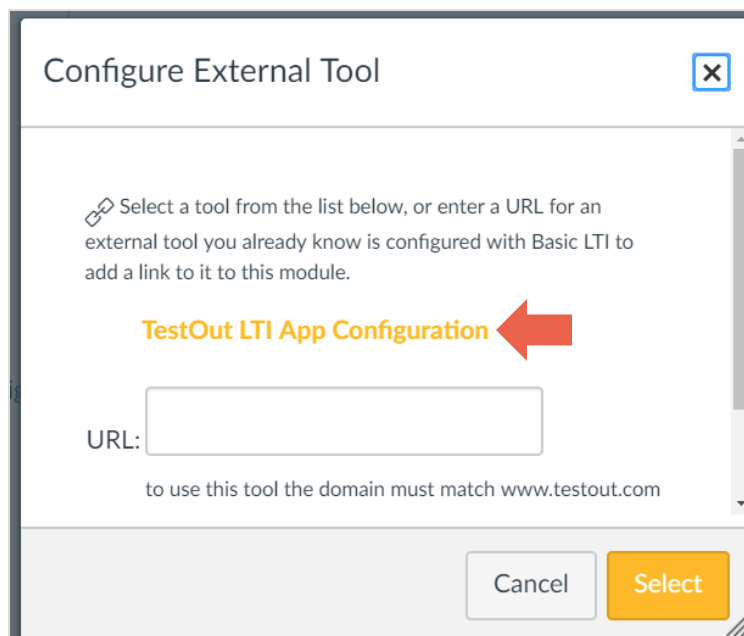
Add points to assign the number of points you want this resource to be worth.

Select *External Tool* in the Submission Type dropdown box and press *Find*.

You will see the external tools you have set up populate in the *Configure External Tool* screen. Select the one you have set up for LabSim.

At this point, you can customize the URL to do a variety of things. Simply add ? to the end of the URL and add the following custom parameters (parameters are separated by &).

- **Go to a Course:** Add *labsim_course_id=* followed by the ISBN of your course (example: 978-1-935080-43-5). **This is required to connect to LabSim.**
- **Go to a Specific Resource:** To go to a specific resource inside of the course you have specified, add *labsim_section_id=* followed by the section (example: 9.5.3).
  - For specific information on how to link to other LabSim resources, refer to the Linking to a Custom Exam/Linking to a Pro Certification Exam sections.
- **Allow Students to Submit a Score Back to Canvas:** If you wish to have students send a score back to Canvas from a resource, add *labsim_allow_outcomes=true* to the URL *(Please note that you could do this globally if you added the parameter to the external app)*.

In the end, your URL should look similar to the one below:

http://www.testout.com/orbispartner/basiclti.aspx?labsim_course_id=978-1-935080-43-5&labsim_section_id=9.5.3&labsim_allow_outcomes=true

When finished, click *Select*.

Note: If you wish to create a LabSim class or add students to a LabSim class, refer to Creating a LabSim Class using LMS Integration.

Click *Save & Publish.*

Pooled or Group Licensing

If you are using Pooled or Group Licensing, after clicking a link, the following screen will come up, showing the course you will launch in LabSim. If you are using Activation Codes, please jump to the next section.

Click *Launch LabSim*.

Note: If you have an existing LabSim account, make sure your emails in Canvas and LabSim match to connect your Canvas account to your LabSim account

You will notice that you are directed to the correct resource inside of LabSim.

There is not a *Submit Score* button when logging in as an Administrator or Instructor.

Students will see a score button as shown below.

Activation Codes

If you are using activations codes and do not have an existing account **OR** if you have an existing account but do not have the product you are trying to access activated, select the link to your course and you will see the following screen.

Input your activation code and click *Activate.*

Note: If you have an existing LabSim account, make sure your emails in Canvas and LabSim match to connect your Canvas account to your LabSim account
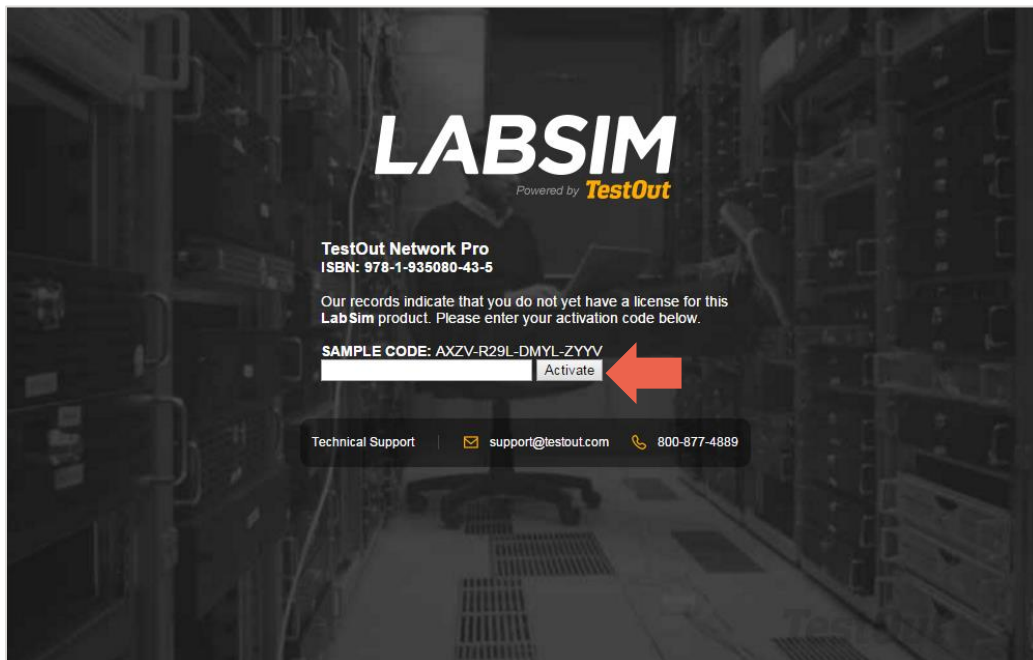
If you have an existing LabSim account and the product you are trying to access is activated, select the link to your course and you will see the following screen. Click *Launch LabSim*.
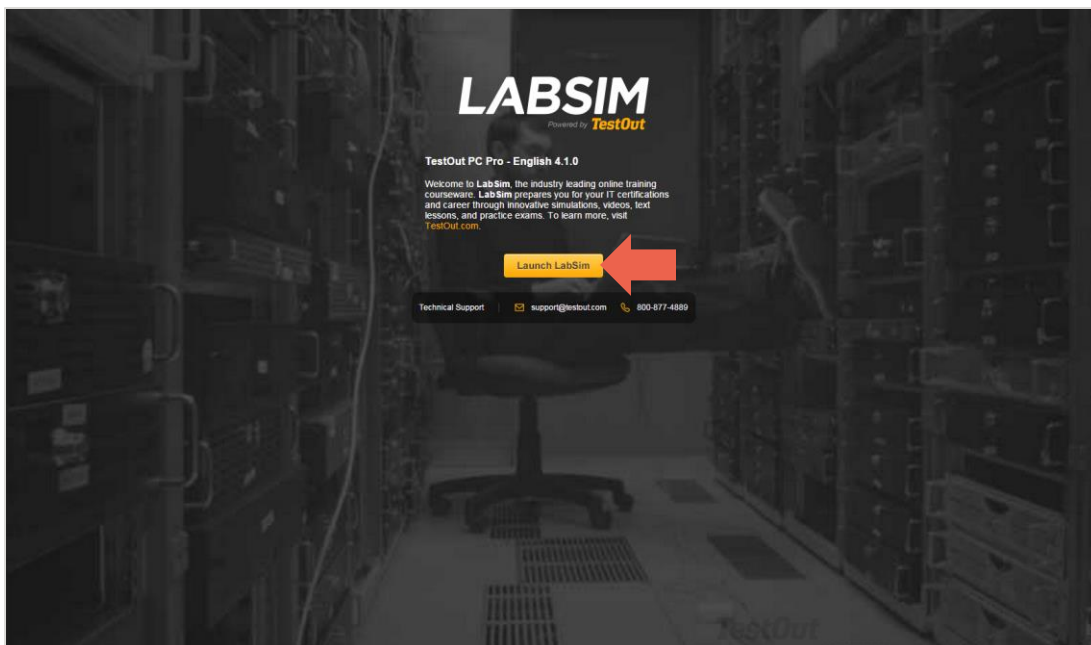
You will notice that you are directed to the correct resource inside of LabSim.

There is not a *Submit Score* button when logging in as an Administrator or Instructor.
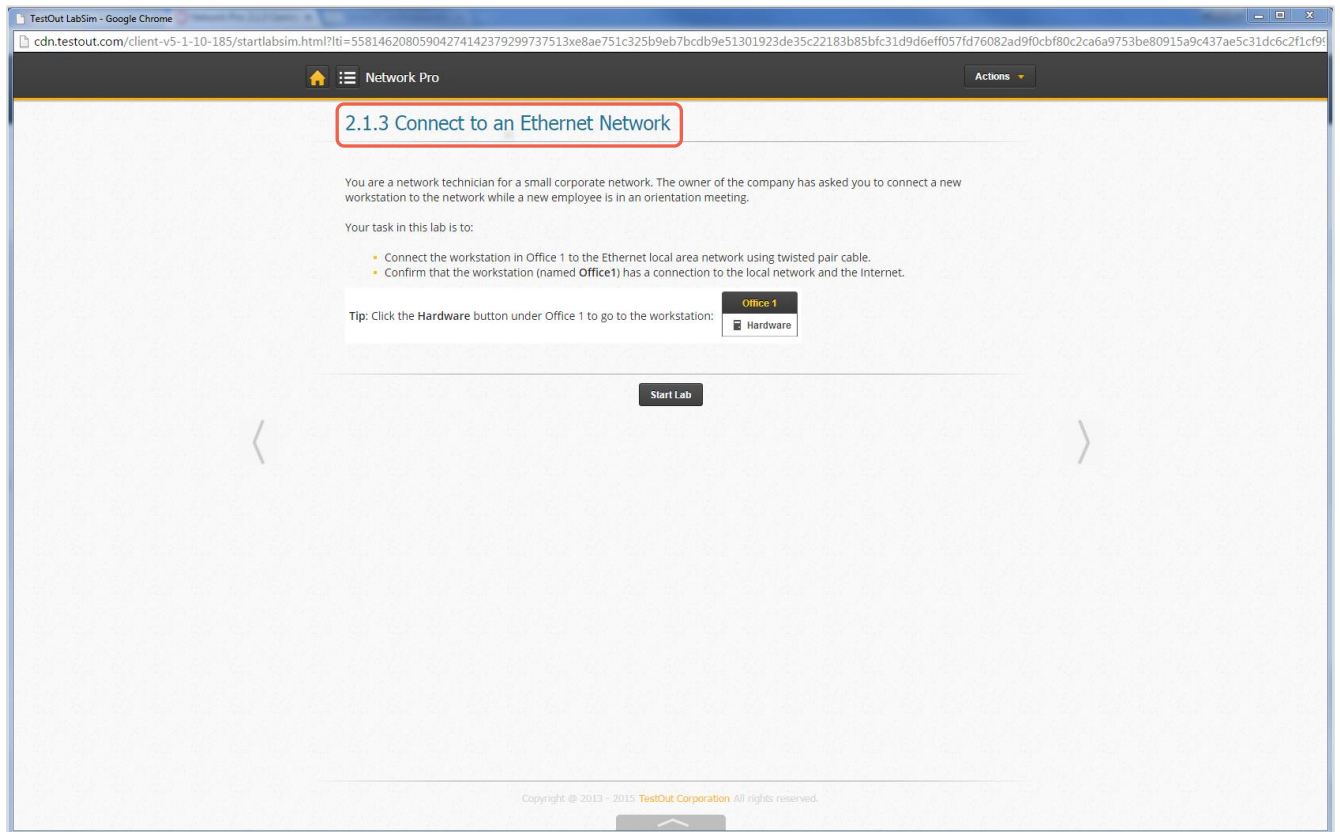
Students will see a score button as shown below.
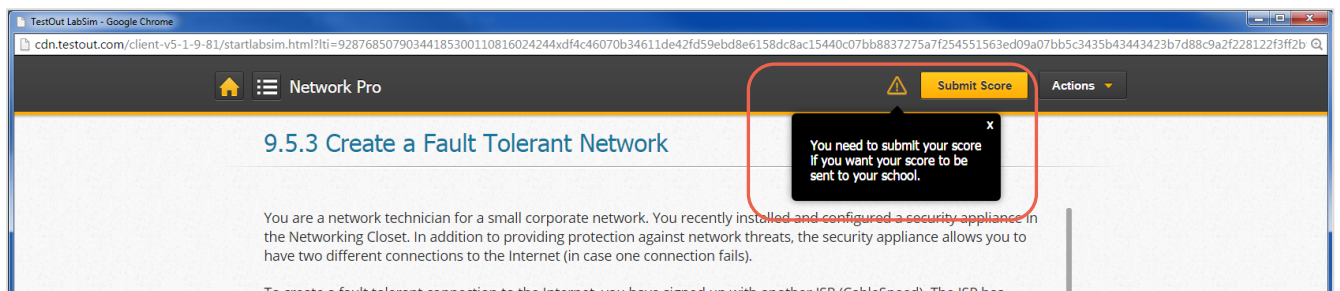
LINKING TO A CUSTOM EXAM

To link to a Custom Exam you will first need to find the Exam ID found on your Custom Exams screen in LabSim.

Following the same steps outlined in Creating a Link to LabSim, use the Exam ID in place of the section number.

You must include *labsim_class_id={Your Class Name Here}* (or make sure you have the parameter included in the external app) if you want the score stored and visible within your LabSim class.

For example:

https://www.testout.com/orbispartner/basiclti.aspx?labsim_course_id=978-1-935080-43-5&labsim_section_id=X2BFE&labsim_class_id={Your Class Name Here}

LINKING TO A TESTOUT PRO CERTIFICATION EXAM

To link to a TestOut Pro Certification Exam, follow the same steps as outlined in Creating a Link to LabSim, but simply replace the value following *labsim_section_id=* with the name of the Pro Certification Exam.

For example:

https://www.testout.com/orbispartner/basiclti.aspx?labsim_course_id=978-1-935080-43-5&labsim_section_id=TestOut%20Network%20Pro%20Certification

Note that the *labsim_course_id=* followed by the ISBN of your course is still required.

Scores cannot be sent back to the LMS for Pro Certifications at this point.

CREATING A LABSIM CLASS USING LMS INTEGRATION

Using LTI to Create a Class

It is recommended that you include *labsim_class_id=@context_title* to while setting up the external app. This will create a LabSim class using the Canvas course name.

Additionally, You can create a class in LabSim by adding the custom parameter *labsim_class_id* followed by the name of your class at the end of a URL.

Note: If you have spaces in your class title, please insert %20 in place of the spaces.

In the end, you URL might look something like this:

http://www.testout.com/orbispartner/basiclti.aspx?labsim_course_id=978-1-935080-43-5&labsim_section_id=9.5.3&labsim_allow_outcomes=true&labsim_class_id=Test%20Networking%20Class

Assigning a Teacher and Product to the Class

Creating a New Class

A teacher can create a class by clicking on an assignment where the link contains the *labsim_class_id* parameter.

By doing this, the teacher creates the class, is assigned as the instructor of this class and associates a TestOut product to the class (based on the ISBN contained in the URL).

Note: If a different instructor clicks on this link, they will be placed as the instructor of this course, replacing whoever the instructor was prior to that point.

Linking to an Existing LabSim Class

A teacher can add students to class that was previously created in LabSim by creating a link with the *labsim_class_id* and adding the EXACT class name after the custom parameter (remembering to add %20 in place of any spaces).

Adding Students to the Class

To add students to a class, students need only to click on an assignment that contains the *labsim_class_id* parameter in the URL. Once a student clicks on ONE LINK that contains *labsim_class_id*, they will be added to the indicated class.

Note: The custom parameter *labsim_class_id* does not need to be in every link to LabSim, just make sure it is in one of the initial links a student clicks on inside of your LMS.

IMPORTING A COURSE SHELL INTO A CANVAS COURSE

After creating your course, navigate to the *Settings* page.

Select *Import Course Content*.

Select *Canvas Course Export Package*. Choose the Canvas file you wish to import. Choose *Select specific content* radial button and then *Import*.

The course will take some time to import…

Once this has finished running, press *Select Content*.

Select the *Assignments.*

Do not select the LTI External Tool.
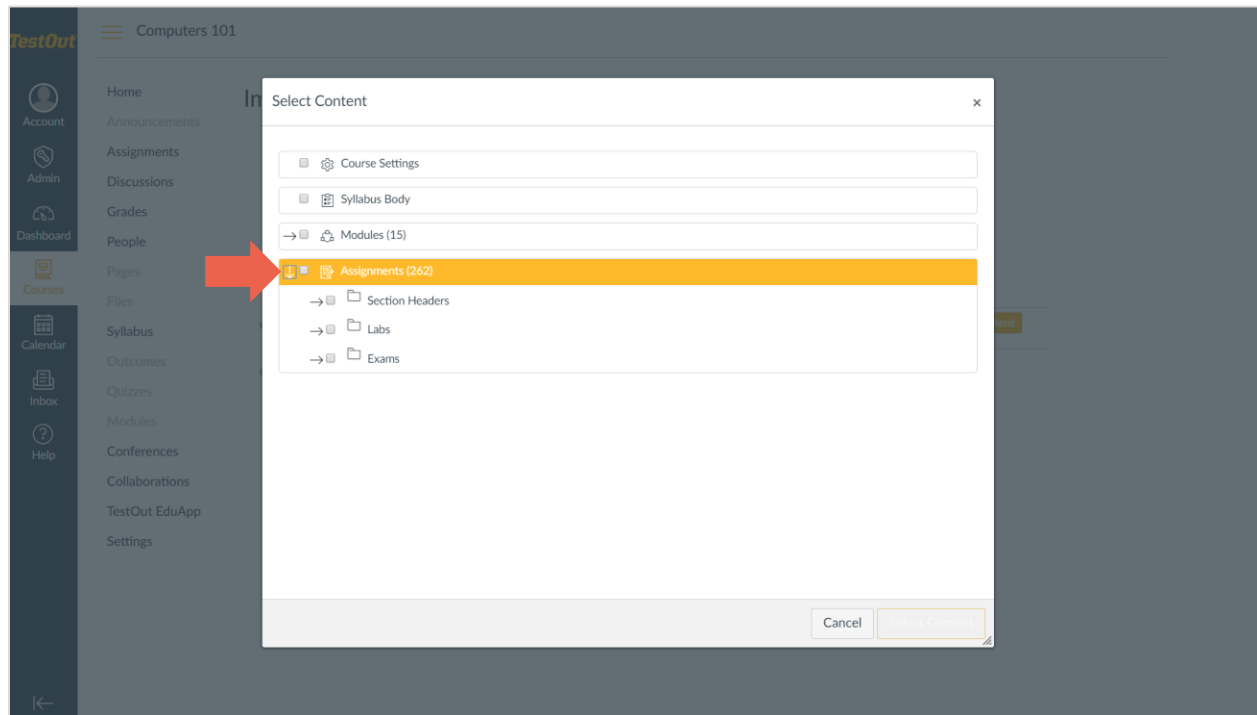
Your import will be queued and then will show the status *Running*.
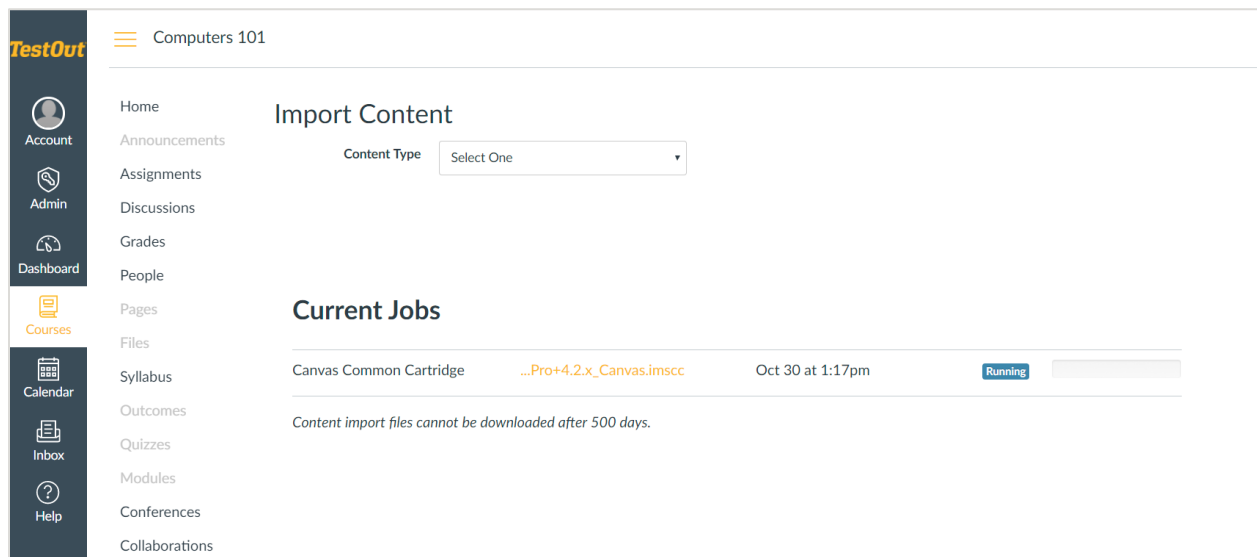
Once it has finished running, navigate to the *Assignments* page.

You will see the *Assignments* (links to LabSim resources) have been imported into your *Assignments* page.

COMMON ERRORS

There are some common errors that we have seen when trying to integrate LabSim with LMS Systems.

Below you see an error when trying to connect to LabSim. The text in the box will often give you a clue as to what the information LabSim is not receiving so that you can correct the problem in you LMS. Below are some of the common errors. If you see an error other than one of these, please contact us.
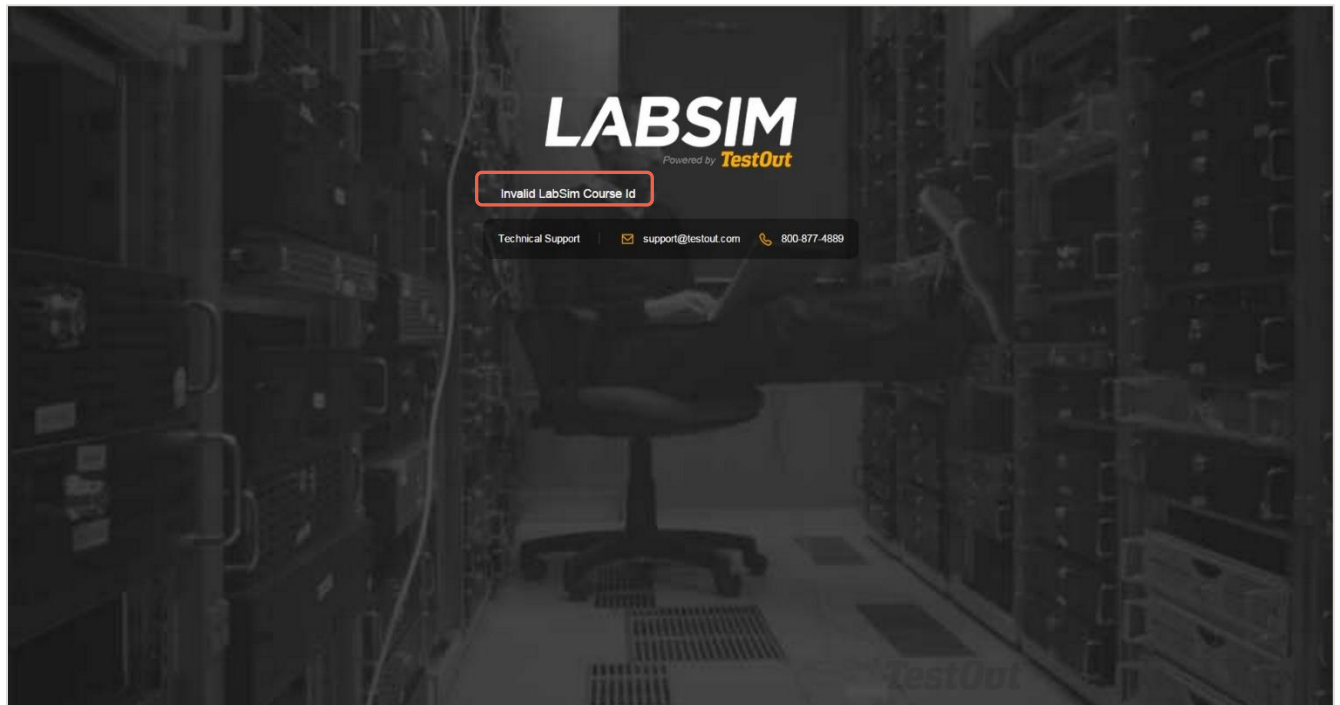
Invalid Consumer Key: This means that you have inputted your Consumer Key incorrectly. Please verify you have keyed the Consumer Key correctly. If you have, please take a screenshot and contact us.

OAuth Authorization Failed: Your Shared/Consumer Secret is incorrect. Please verify you have keyed the Consumer Key correctly. If you have, please take a screenshot and contact us.

Invalid LabSim Course Id: You have inputted the parameters that direct you to the course you are looking to access. The parameter should look like this—the value after the equal sign is the ISBN of your LabSim product:

> *labsim_course_id=978-1-935080-43-5*

Invalid User Id: LabSim requires that the User ID is passed from the LMS. If you are receiving this error, you (or your admin) needs to change the permissions in your LMS to pass over the User ID to LabSim.

Invalid User Role: LabSim requires a user role to be passed over from the LMS. This is how LabSim knows to create an instructor account or a student account. If you are receiving this error, you (or your admin) needs to change the permissions in your LMS to pass over the role to LabSim.

No licenses are available for the requested product: This error means that your Consumer Key and Secret have been setup with a group licensing model and there are no more licenses available. Please contact your Account Executive to get more licenses added to the pool

Server Error in '/OrbisPartner' Application

The "Launch URL" you input into the LMS is incorrect. It should be:

http://www.testout.com/orbispartner/basiclti.aspx

Please verify that it is correct. If it is and you are still getting this error, please take a screenshot of both the screen and the URL you have input and contact us.

Server Error in '/OrbisPartner' Application.

The resource cannot be found.

Description: HTTP 404. The resource you are looking for (or one of its dependencies) could have been removed, had its name changed, or is temporarily unavailable. Please review the following URL and make sure that it is spelled correctly.

Requested URL: /orbispartner/basiclti.aspx

Version Information: Microsoft .NET Framework Version:4.0.30319; ASP.NET Version:4.0.30319.18449