

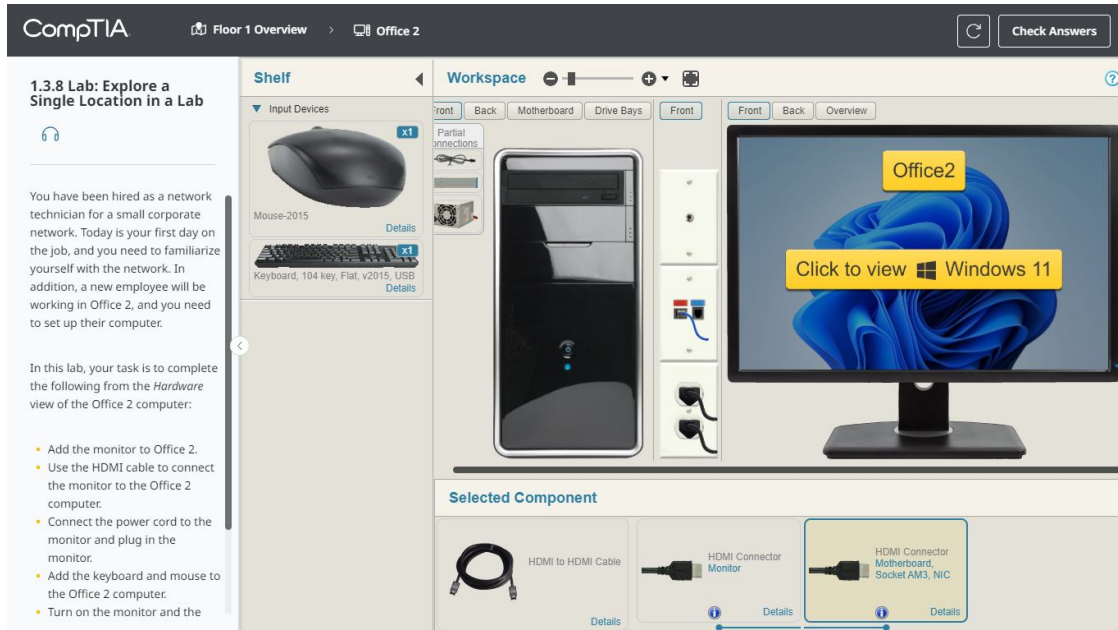


# Using Hardware Labs

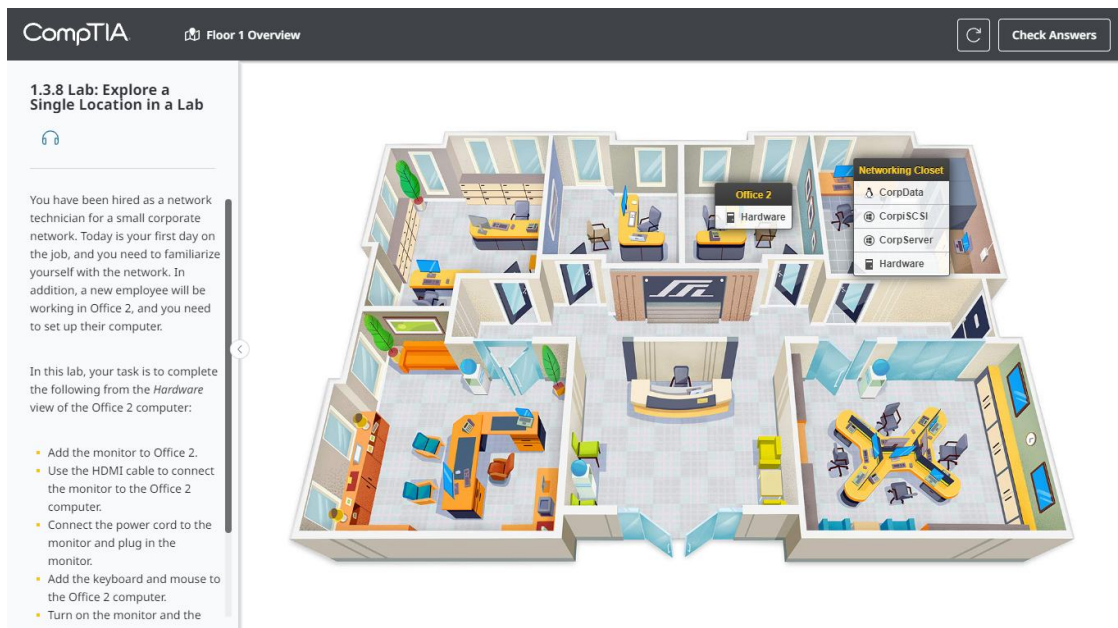
Many CertMaster lab simulations allow you to apply your knowledge to virtual hardware. This guide contains general instructions to help you get started. You may want to have this document open for reference during your first few hardware labs.

# Lab Layout

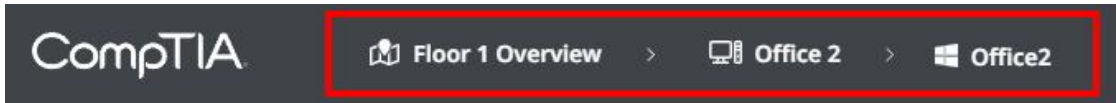
Lab simulations follow a standard layout. The left sidebar includes the lab scenario and a list of tasks to complete.



The main area may show hardware components (shown above), a simulated software environment (shown on page 7), or a map of the area in which you'll be working (shown below).



The left side of the top bar contains breadcrumbs showing your current location and allowing you to navigate back. This example shows that you're in the Windows operating system, on the Office 2 computer, on Floor 1. You can elect any of these breadcrumbs to go to that location.

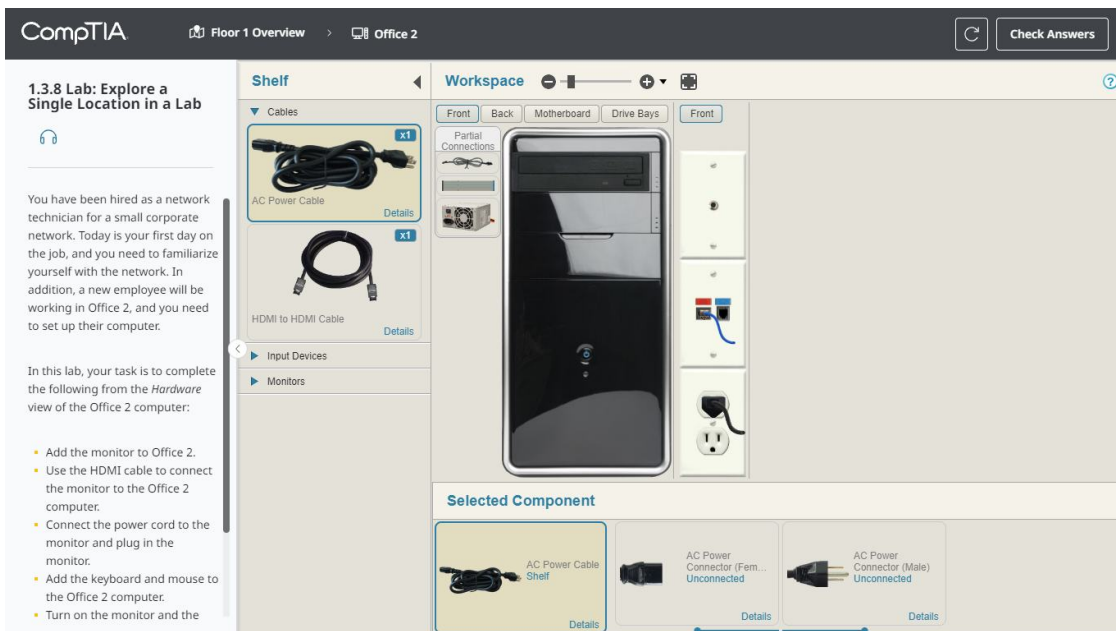


The right side of the top bar includes options to restart or the lab or check your answers. Some labs have additional options here.



## Hardware

When working with hardware, you'll spend most of your time in a view that shows a workspace, a shelf, and details about the current selected component.



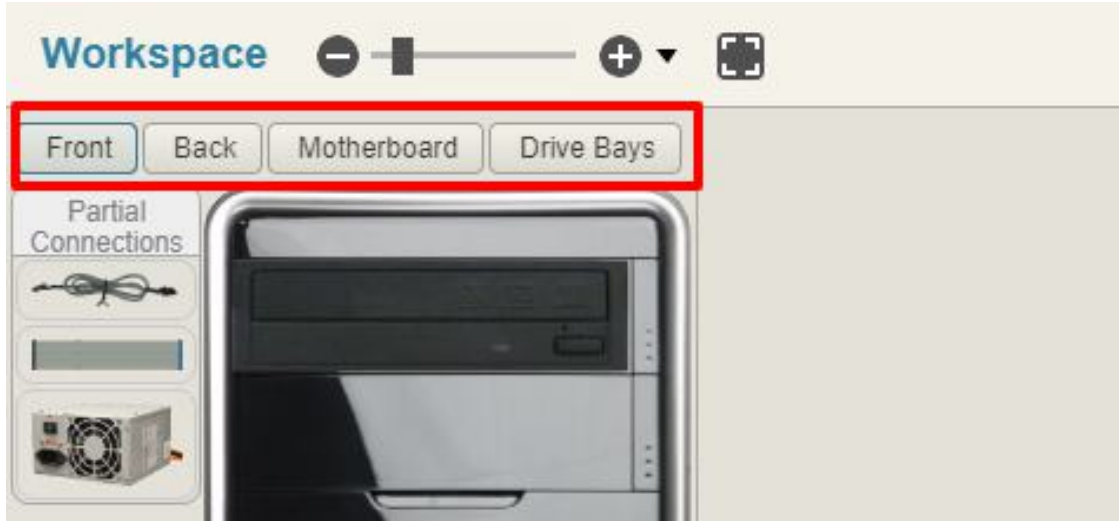
Let's look at each of these areas and see how you can use each one to accomplish the tasks assigned in the various labs.

# Workspace

The main area for hardware labs is the workspace. It shows items you're working with. You can zoom in and out as needed to interact with items in the workspace.

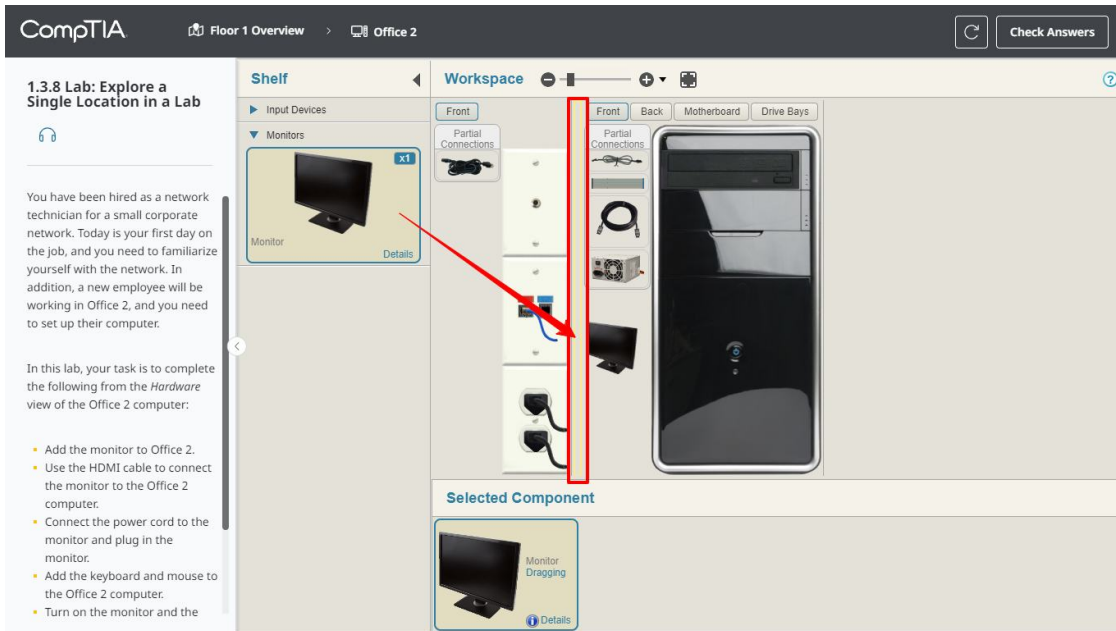


Items in the workspace may have multiple views. For example, you can view the system case from the front or back. You can also view the motherboard and drive bays.



# Shelf

Drag components from the shelf to the workspace to use them. Items can be dropped to the left or right of other objects in the workspace. A yellow rectangle will show when your cursor is over a drop zone.



**Hint:** You won't need to use all items on the shelf in all labs.

## Selected Component

When you select an item on the shelf or in the workspace, it shows in the "Selected Component" area. Clicking "Details" shows additional information about that component. For cables, each connector end shows if and where it is connected.



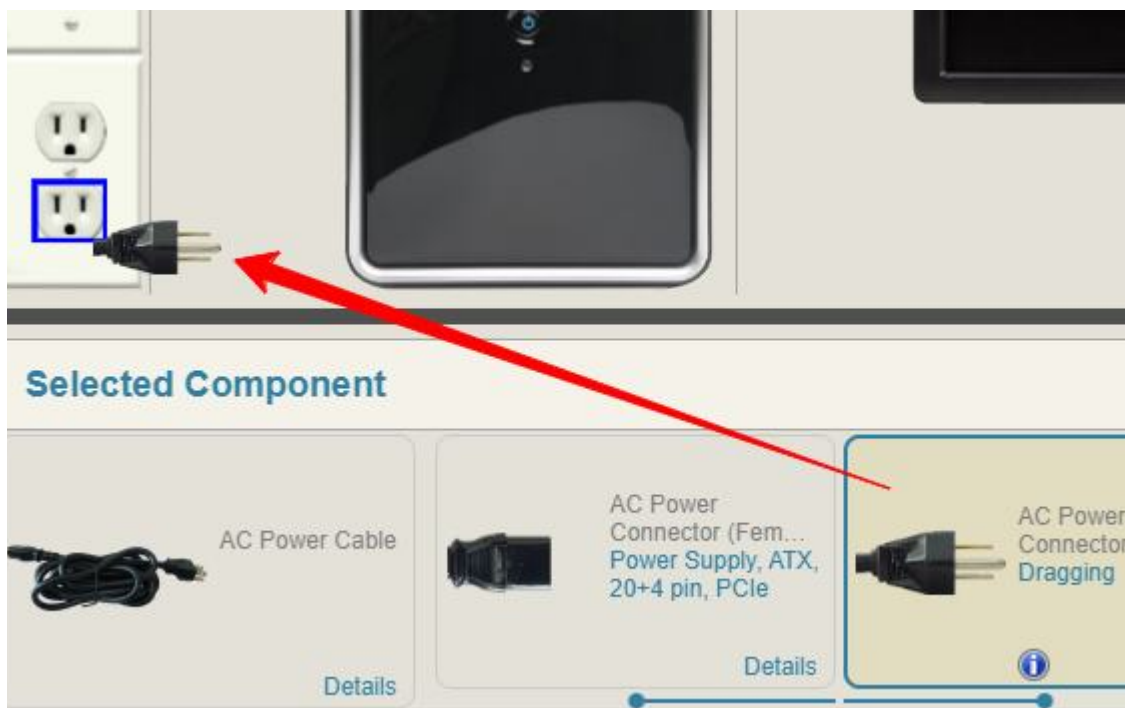
**Hint:** Remember to check the connected status of cable ends. A common mistake is to connect one end and not the other.

# Connecting Cables

To connect a cable, you can either:

1. Select the cable. Then drag its connector ends from the “Selected Component” area to corresponding ports (shown below).
2. Or drag the cable from the shelf and drop it onto a corresponding port. If the cable ends are different from each other, you’ll need to identify which one you want to connect to that port.

While dragging a cable end, when your cursor is over a port, a blue highlight will show. To connect, drop the end while the blue highlight is showing. (Note that not all ports fit all cable ends.)



**Hint:** While dragging an item, you’ll see a small thumbnail image of that item. When connecting a cable end, your **cursor** (not the thumbnail image) must be over the drop zone for you to make a successful connection.

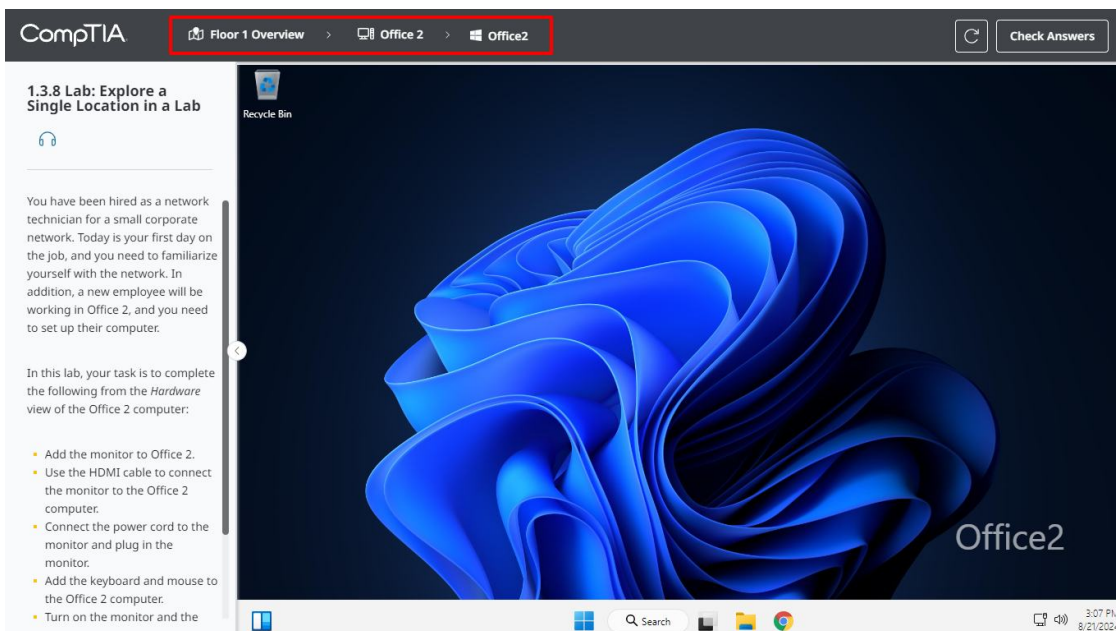
When connecting cables, you must connect both ends. A “partial connections” window appears when an item isn’t fully connected.



**Hint:** You may not need to resolve all partial connections to complete a lab.

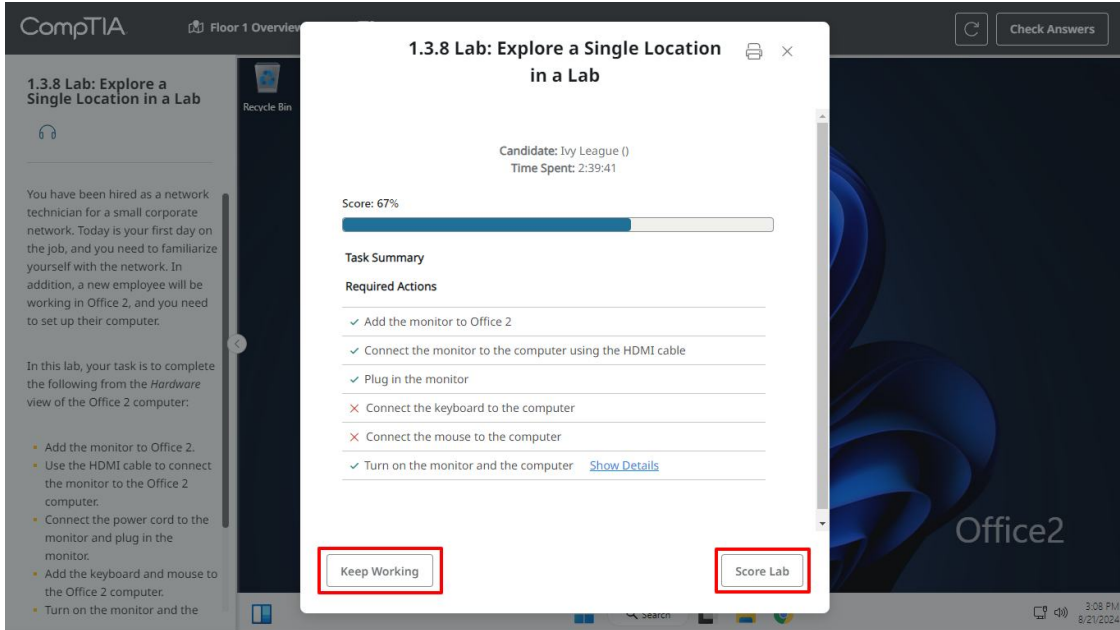
## Operating System Environment

When the computer and monitor are turned on, you may enter a simulated operating system environment. You can use the breadcrumbs at the top to navigate back to the hardware view, or to the floor layout.



# Scoring the Lab

Click “Check Answers” in the upper right to see how you're doing. From here, you can keep working or submit your work for a score.



# Getting Help

For help, click the question icon at the top right of your home screen for a list of options.

