INTRODUCTION

This guide will walk you through the steps to configure TEEAL.

Before proceeding

If your TEEAL machine will be connected to a local network or connected to a computer with a network connection, you will need the following information relevant to your local network:

- static IP address for the TEEAL machine
- subnet mask
- gateway (IP address of your router)

If you don't know the settings to use here, please contact someone at your institution who is familiar with the network that the TEEAL machine will join.

Any questions? Contact the TEEAL team at teeal@cornell.edu.

PARTS:

- Computer with ethernet port (1)
- TEEAL machine (1) included
- Power supply and cord (1) included
- Ethernet cable (1) included
Step 1 — Unpack the TEEAL shipment and ensure you have received all components

- TEEAL machine
- Power supply and cord
- Ethernet cable

Step 2 — How will you connect your TEEAL machine?

**STAND-ALONE configuration:**

TEEAL machine connected directly to computer with no network connection

NOTE: Only one computer can access TEEAL.

**NETWORKED configuration:**

TEEAL machine connected directly to wired ethernet network via hub or switch

---

Take a moment to determine how you will connect your TEEAL machine. There are two ways to use TEEAL:

- Connect your TEEAL machine to a stand-alone computer that has no network connection. This is a STAND-ALONE configuration (only one computer can access TEEAL).
- Connect your TEEAL machine directly to your local network. This is a NETWORKED configuration (multiple computers can access TEEAL).
Step 3 — Turn on the TEEAL machine

- Connect the round end from the power supply to the back of the TEEAL machine.
- Plug the power cord into a receptacle.

ℹ You may require an adapter for the US 3-prong plug.

- Press the power button on the front of the TEEAL machine. The button lights up when the machine is on.
Step 4 — Connect the TEEAL machine to your computer

- Plug one end of the supplied red ethernet cable into the ethernet port on the back of the TEEAL machine.

⚠️ The TEEAL machine has two ethernet ports. When looking at the back of the machine, the port on the right is the one that should be used (closest to the right edge of the case).

- Plug the other end of the red ethernet cable into the ethernet port on your computer.
Step 5 — Ensure your computer is not connected to any network

- If your computer has a wireless card (wifi), **turn the antenna off**.
- If you are unable to find a switch on your computer to turn off the wireless antenna, you should disable the wireless card in your computer settings.
- The only ethernet cable connected to your computer should be the red cable running to the TEEAL machine.

ℹ️ The network cable and wireless must be temporarily disconnected so that your computer talks only to the TEEAL machine. This allows your computer to receive an IP address in the reserved 169.254.X.X **link-local** space.
Step 6 — Verify your computer's IP address - (Windows computers)

The details for this step are Windows specific. For help with Linux configuration, see Step 16 in the Appendix. Contact the TEEAL team if you require assistance.

- Click the Start menu and type cmd in the search box.
- Select the cmd program from the search results to open the command prompt.
- In the command prompt window type: `ipconfig | find "IPv4"`
- You should see a list of IP addresses.

⚠️ If you can see an IP address that starts with 169.254, skip ahead to Step 8 Access the TEEAL application. Otherwise, proceed to the next step to properly configure your computer's IP address.
Step 7 — Configure your computer's IP address (Windows computers)

The details for this step are Windows specific. For help with Linux configuration, see Step 17 in the Appendix. Contact the TEEAL team if you require assistance.

- Click **Start** and type **network connections** in the search box.
- Select **View network connections** under Control Panel in the search results.
- Right click on the **Local Area Connection** and select **Properties**
- In the Networking tab, select **Internet Protocol Version 4 (TCP/IPv4)** and click the **Properties** button.
- In the General tab, ensure **Obtain an IP address automatically** is selected.
- Click the Alternate Configuration tab and ensure **Automatic private IP Address** is selected. Click the **OK** and **Close** button in two consecutive windows to save your setting.
- Return to Step 6, and verify that when you type `ipconfig | find "IPv4"` you can see an IP address that starts with 169.254.
Step 8 — Access the TEEAL application

- Open a browser on your computer and enter **169.254.1.10** in the address bar.

- You should be greeted with a sign in screen for TEEAL.

⚠️ If you will connect your TEEAL machine to a network, don’t attempt to sign in or sign up yet! We want to use the Admin sign in first to configure the TEEAL application. Proceed to step 9.

ℹ️ If you are configuring TEEAL to connect to a STAND-ALONE machine, where the TEEAL machine is connected to a stand-alone computer that has no network connection, you’re done!
Step 9 — Network configuration only - Admin sign in

⚠️ If you are setting up TEEAL as a STAND-ALONE machine, you do not need to continue. If you will connect your TEEAL machine to a network, continue on this page.

ℹ️ Don’t attempt to sign in or sign up just yet, we want to use the Admin sign in first to configure the TEEAL application.

- Click the Admin link (see bottom left side of the page).
- Sign in to the system using **admin@teeal.org** for the email address and **essential-ag** for the password.
Step 10 — Configure the TEEAL machine for your local network

- In the upper right corner of the page, click on the admin@teeal.org email address and select **Configure network**

- Fill out the form using the appropriate settings for your local network. All fields are required.

<i> If you don't know the settings to use here, please contact someone at your institution who is familiar with the network that the TEEAL machine will join.

- Be sure to write down the new IP address you entered: _____________________ You will need to use this to access TEEAL in the future!

- Add your institution name and click on the **Update** button.
Step 11 — Confirm the new network settings

- Click **Continue** to confirm the changes (or click **Cancel** to return to the previous screen). If you don't make a choice within 15 seconds, your changes will be automatically applied.

- TEEAL will indicate that the network update is in progress and will display a success message once it has completed. The machine will then shut down.

⚠️ Wait for the power button light to turn off before unplugging the power cord from the machine!
Step 12 — Connect the TEEAL machine to your local network

- Unplug the red ethernet cable from the TEEAL machine
- If you need to move the TEEAL machine to a different location in order to connect it to your local network, you should do so now before powering it on again.
- Connect the TEEAL machine to your local network using an ethernet cable and port supplied by your institution.
- Press the power button on the front of the TEEAL machine to turn it back on.
- Go to any computer on the same subnet of the local network that the TEEAL machine was just added to, open a browser and enter the IP Address you wrote down from Step 10.
- If you can see the TEEAL sign-in screen, you’re done!

ℹ️ The TEEAL application is only available on a single subnet within your local network by default. Sign in as an admin and go the Configure network page to see the default subnet that currently has access. If you need to provide access to additional subnets, see step 14 for Advanced Network Configuration.
Step 13 — OPTIONAL: Advanced Network Configuration

After initial network configuration, you may choose to manage additional subnets or VLANs on your TEEAL application. By default, the TEEAL application is only available from one subnet.

- Login as the Admin user and select **Network Configuration** from the drop-down menu.
  - Click **Manage Subnets**.
- Enter the CIDR notation for any additional subnets that need access to the TEEAL application.
- When you are done making changes, click **Save** to continue.
- If you're not sure what values to enter, check with the person that manages your network.
Step 14 — APPENDIX A - Linux configuration steps

- The following steps outline how to configure your TEEAL machine on a Linux PC.
- These steps were created with Ubuntu Linux in mind, but they should generally apply to most Linux distributions.
- If you encounter problems with the Linux configuration, please contact the TEEAL team for assistance.

Step 15 — Verify your computer’s IP address (Linux computers)

- The details for this step are Linux specific. Contact the TEEAL team if you require assistance.
- Open a Terminal window.
  - (In Ubuntu, you can open a terminal window by clicking the Ubuntu icon in the top left of your screen. Type “terminal” into the search box and hit enter.)
- In the Terminal window, type `ifinfo`.
- You should see a list of IP addresses.
- If you have an IP address that starts with 169.254, go back to Step 8 - Access the TEEAL application. Otherwise, proceed to Step 17 to properly configure your computer’s IP address.
Step 16 — Configuring your computer’s IP Address (Linux computers)

- The details for this step are Linux specific. Contact the TEEAL team if you require assistance.

- Click the network icon in the top left corner, and select Edit Connections from the drop down menu.

- Select the wired connection and click Edit.

- Choose the IPv4 Settings tab, and select Link-local Only from the Method drop-down list. Click Save.

- Return to Step 16, and verify that when you type ifconfig in a terminal window, you can see an IP address that starts with 169.254.
WARNING: Resetting your TEEAL machine to factory defaults means that you will lose any previous network configuration, and you will have to reconfigure your TEEAL machine by starting at the beginning of this guide. Contact the TEEAL team if you need help.

- Login to TEEAL as the Admin user.
- Choose Reset from the drop down menu in the top right.
- Click Reset Now.
- After a few moments the TEEAL machine will reset and shut down. When you turn the TEEAL machine on again, it will have the factory defaults.
Step 18 — Appendix C - Connect a monitor and Keyboard to your TEEAL Machine

⚠️ WARNING: There is no need to do this step unless you are instructed to. The process of booting the TEEAL machine to the command line is for advanced use only.

- You will need your TEEAL machine, a USB keyboard, and a monitor with a VGA cable and power cord.
- Connect the monitor to your TEEAL machine. If you have a VGA cable (shown), connect it in the circled location. If you have a DVI cable (not shown), connect it in the location directly below the VGA cable.
- Connect your monitor’s power cable and plug it in.
- Connect a USB keyboard to any of the USB ports on the back of the machine.
- Turn your monitor on, and then turn the TEEAL machine on.
Step 19 — APPENDIX C: Reset your TEEAL machine from the command line

WARNING: this procedure will reset your TEEAL machine to its factory defaults. You should only perform this step when instructed to.

- Use the steps in APPENDIX B to connect a keyboard and monitor to your TEEAL machine.
- Turn the monitor on, and then turn the TEEAL machine on.
- The TEEAL machine will display text on the monitor as it boots up.
- When the TEEAL machine is finished booting up, you will see a prompt on the screen.
- Type the word reset, and press Enter.
- The TEEAL machine will reset to factory defaults. Disconnect the monitor and keyboard from your TEEAL machine.