

ACT Technical Guide for Online Testing

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Overview of the ACT Online Administration

This guide will help technical staff configure an organization's systems for the ACT test taken online.

Frequently Used Links

Table 1: Frequently Used Links

Site	URL
TestNav Online Support	https://support.assessment.pearson.com/TN/testnav-online-support-16908292.html
PearsonAccess ^{next}	https://testadmin.act.org
PearsonAccess ^{next} Mock Administration (training site)	https://training.testadmin.act.org
Download TestNav Software	https://download.testnav.com

Systems for Online Testing

PearsonAccess^{next} is the web application used by test staff (i.e., test coordinators, room supervisors) to manage online testing and start and monitor tests. It is located at <https://testadmin.act.org>.

TestNav is the test delivery engine used by examinees to take the tests. It can be downloaded at <https://download.testnav.com>.

Equipment at Your Organization

The technical coordinator needs to know the following information about the organization's equipment to ensure it meets hardware, software, and other technical requirements defined by ACT.

Table 2: Information about Equipment at Your Organization

Category	Information You Need to Know
Internet Connection	<ul style="list-style-type: none"> Type of internet connection at your organization Internet bandwidth/speed

Category	Information You Need to Know
Devices	<ul style="list-style-type: none"> • Number of devices available for examinees to use • Number of devices available for administrative access • Types of devices • Device owner(s)/administrator(s)
Operating System, Processor, Memory	<ul style="list-style-type: none"> • Operating system for each device • Processor for each device • Memory for each device
Monitors	<ul style="list-style-type: none"> • Screen resolution for each device • Display size for each device

Note: Browser-based testing is not supported.

Site Readiness Steps

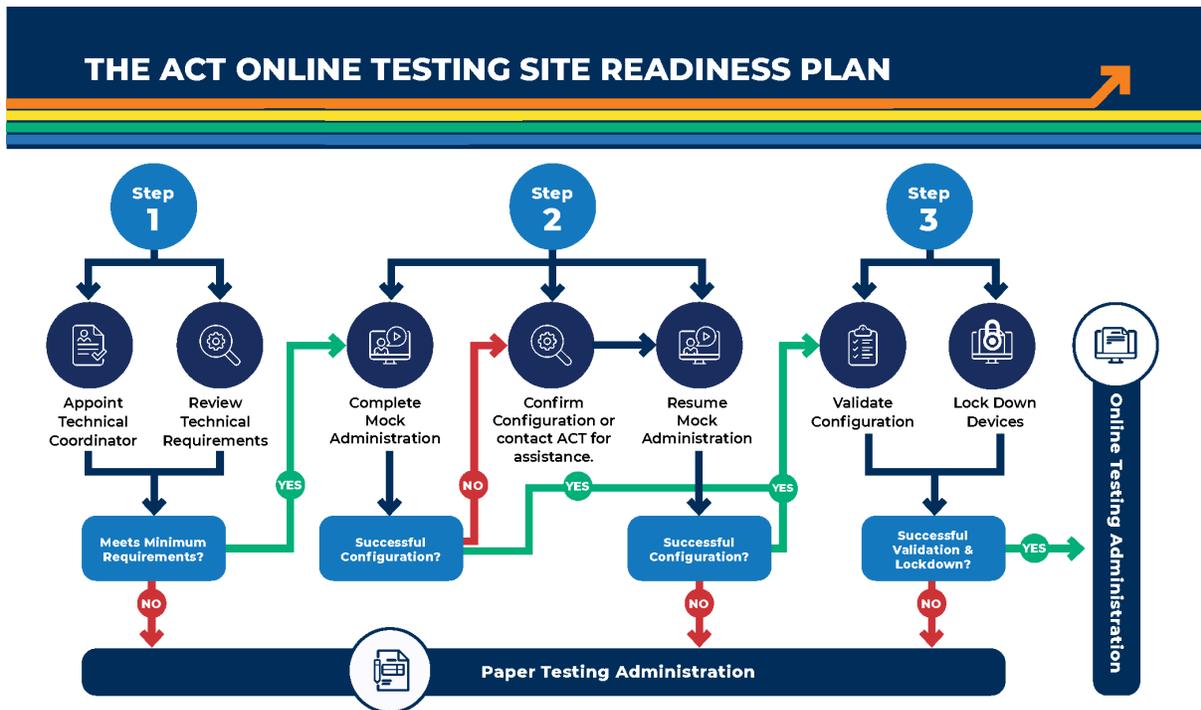
The test coordinator and technical coordinator need to complete these steps to administer the ACT online.

- **Step 1**
 - The test coordinator appoints a technical coordinator.
 - The technical coordinator reviews technical requirements.
- **Step 2**
 - The test coordinator completes a mock administration and training (if the site meets [TestNav System Requirements](#)).
 - If the mock administration is successful, move to Step 3.
 - If it not successful, refer to the note below for troubleshooting information or contact ACT for additional support.

Note: Please see the *TestNav System Requirements* section for more information.

- **Step 3**
 - The technical coordinator validates configuration and locks down devices.

Note: If at any point the technical coordinator doubts that online testing can be accomplished, the technical coordinator should advise the test coordinator to switch to a paper administration.



Related information

[TestNav System Requirements](#)

Information about hardware and software requirements, virtual environments and thin clients, exemplisting, and using a wireless network.

Technical Coordinator Role

The technical coordinator installs and configures testing software and helps the test coordinator set up computers for testing. The person in this role must be available on test day to troubleshoot any technical issues that may arise.

Number required: One per test site

Technical Coordinator Responsibilities

- Ensure the school’s computers and infrastructure meet online testing requirements
- Help the test coordinator and other staff set up for test day (includes examinee and administrative computers and test rooms)
- Rerun applicable system checks the week before test day on all applicable computers if the test environment is "unfrozen" for an update
- Troubleshoot technical issues staff or examinees may have on test day

Administrative Computer in Each Room

Each test room must have a computer that the room supervisor will use to access PearsonAccess^{next} to unlock, start, monitor, manage, and stop test sessions for the room.

This computer must meet the requirements listed at <https://support.assessment.pearson.com/display/PAsup/System+Requirements> and reside in an area where the room supervisor can see all examinees in the room.

Preparing Devices to Ensure Test Content Security

Preparing Administrative Computers

Turn off or disable any management software that would allow secure test content on examinee testing devices to be viewed on any other device (i.e., LanSchool, NetopVision, Hapara, or similar applications). Also, ensure that the administrative computer can successfully launch and utilize PearsonAccess^{next}.

Preparing Examinee Computers

All software applications, Internet browsers, cameras (still and video), screen capture programs (live and recorded, such as Skype), email, instant messaging, application switching, media players (such as iTunes), spelling or grammar check applications (such as Grammarly), and printing capability must be closed before testing begins.

Failure to close applications will result in the examinee receiving an error when they attempt to log into TestNav. The error will not be resolved until the applications are closed and no longer running in the background.

Disabling Automatic Application Launching and Notifications

TestNav must be the only application running on examinees' computers during testing. If an application launches during a test session, TestNav will exit the examinee from TestNav. Before testing, configure any applications that may automatically launch to **disable automatic launch**.

Common automatic launches to disable:

- Anti-virus software performs automatic updates
- Power management software on laptops warns of low battery power
- Screen savers activate
- The computer goes into sleep mode
- Email notifications appear
- Calendar notifications appear
- Laptops prompt for software updates

TestNav Overview

An overview of using TestNav, including: which version is needed, the advantage of completing a mock administration, and using Chromebooks.

Required Version of TestNav

The required version of the TestNav app is 1.12.x. See the Locate TestNav Version Number section for instructions on how to know which version you may already have downloaded. To

set up this version of the app, go to: <https://support.assessment.pearson.com/display/TN/Set+up+and+Use+TestNav>.

An error message will appear when attempting to launch if this version is not installed.

Benefits of Conducting a Mock Administration

Conducting a mock administration is **strongly recommended**. It is the best way to verify the technology setup is complete and accurate—the TestNav app is installed and equipment is configured correctly. It is also beneficial for testing staff to experience online testing in a dry-run, without examinees, to feel more comfortable and prepared for the actual test administration.

To complete the mock administration, refer to the [Mock Administration Guide](#) for instructions and use the PearsonAccess^{next} training site found at <https://training.testadmin.act.org>. Be sure to use this training site for the mock administration, as it does not contain live test content. Live tests must not be accessed by anyone other than examinees on the test day.

IMPORTANT: *The mock administration must not be used as a practice test for examinees.*

Confirming That Chromebooks Are Managed

If your institution uses Chromebooks, they must be managed. You can manage your organization's Chrome devices from a single place using Chrome device management.

Before setting up TestNav on Chromebooks that will be used for testing, verify that the Chromebooks are managed. View the **See if your Chromebook is managed** information at <https://support.google.com/chromebook/answer/1331549?hl=en>.

TestNav System Requirements

Information about hardware and software requirements, virtual environments and thin clients, exemptlisting, and using a wireless network.

Note: *Technical requirements may change on a quarterly basis.*

Minimum Hardware Requirements for TestNav

To determine if your site has enough computers to test all examinees, use this formula:

[number of devices] x [number of days you plan to test] = examinee capacity

For an optimal testing experience, avoid using any computer that takes 10 seconds or more to start and run applications.

Table 3: Minimum Hardware Requirements

Category	Windows	Mac OS	iPad OS	Chrome OS
Supported Devices	Desktop and Laptop	Desktop and Laptop	Apple iPads	Chromebook

Category	Windows	Mac OS	iPad OS	Chrome OS
Processor	x64 - AMD, ARM, ARM64 or Intel-based	x64 - AMD, ARM, ARM64 or Intel-based	Any	Any
Memory	2 GB RAM minimum 4 GB RAM recommended	2 GB RAM minimum 4 GB RAM recommended	1 GB RAM minimum 2 GB RAM recommended	2 GB RAM minimum 4 GB RAM recommended
Screen Size	9.5 inch	9.5 inch	9.5 inch	9.5 inch
Screen Resolution	1024x768	1024x768	1024x768	1024x768
Other Requirements	External keyboard and mouse (or touchpad) for touchscreen devices recommended ² Local File access to home directory	Local File access to home directory	External keyboard and mouse (or touchpad) for touchscreen devices recommended ²	Convertible Chromebooks cannot be used in tablet mode ¹ as a touchscreen device External keyboard and mouse (or touchpad) for touchscreen devices recommended ²
Recommendations	Wired hardware	Wired hardware		

¹Tablet mode means using the device as a touchscreen device without a keyboard and mouse/ touchpad attached.

²Students authorized to test with assistive technology devices will be able to test on a laptop or desktop computer or via paper testing. Students testing with iPads will be able to utilize available accessibility features and authorized accommodations and language supports. However, support for iPads with assistive technology devices remains in development. ACT strongly recommends that examinees taking the ACT writing test on an iPad use an external keyboard.

IMPORTANT: *Linux devices are not supported at this time. An examinee's score will be canceled if a Linux device is used for testing.*

Virtual Environment and Thin Client Are Not Supported

ACT does not provide support for customers utilizing virtualization/thin clients. These tools should not be used for testing.

Software Requirements for TestNav

Table 4: Supported Operating System, Download, and Setup for TestNav

Operating System	Link to Download	Link to Setup Instructions
Chrome OS: Stable Channel (S): 114 - 121 Long-term Support (LTS): 114+ LTS	Chrome Web Store	Set Up TestNav on Chromebook
macOS: 12, 13, 14	TestNav Downloads	Set Up TestNav on macOS
Windows: 10 x64 - 21H2, 22H2 11 x64 - 21H2, 22H2	TestNav Downloads	Set Up TestNav on Windows
iPadOS: 15.2 - 16.x, 17.3.x	Apple App Store	Set Up TestNav on iPadOS

Exemptlisting for TestNav

The test delivery URLs below should be exempted from filtering and inspection within all network security appliances and software such as Firewalls, Content Filters, Gateway Antimalware/Antivirus as well as locally installed security software. Asterisks noted below are required as a "wildcard."

IMPORTANT: *Failing to exemptlist ALL urls listed below will result in issues during the mock administration and on test day.*

URL:Port

- *.testnav.com:80
- *.testnav.com:443
- *.act.org:80
- *.act.org:443
- *.pearsonusercontent.com:80
- *.pearsonusercontent.com:443
- *.thawte.com
- *.usertrust.com
- *.comodoca.com

- .google-analytics.com (optional)

Note: See [Network Requirements and Guidelines](#) for more information.

Tips for Using a Wireless Network

The increase in devices accessing organization networks increases the need for stable Wi-Fi networks, daily monitoring, and maintenance. To help network administrators stabilize Wi-Fi for online testing, use these tips.

- Disable low-end wireless protocols not being used
- Disable Wi-Fi on mobile devices to avoid potential interference
- Ask test rooms to stagger log in to minimize initial loading time on test day
- Conduct a site survey to determine how many wireless access points the organization needs
 - Evaluate existing infrastructure, network design, and Wi-Fi
 - Count the number of user devices
 - Examine the type of user traffic and interference
- Install access points more densely to decrease potential overload
- Reduce Wi-Fi interference from solid materials such as brick, concrete, metal, bookshelves, and cabinets
- Point adjustable Wi-Fi antennas at examinee devices or move examinee devices directly under the access point
- Make sure that no other Wi-Fi networks are using the same channel
- Check your access point user guide to determine if your access points can detect the least congested Wi-Fi channel
- Reduce interference from devices that may not be on Wi-Fi, but may use the same frequency to connect (i.e., cordless phones, Bluetooth-enabled devices, and examinee mobile devices)
- Temporarily turn off or unplug electronics to reduce wireless interference during testing

Preparing TestNav

Instructions to download TestNav, run the App Check, and freeze the test environment.

Download TestNav on Windows - Option 1

1. Go to <http://download.testnav.com>.
2. Select the **Windows .msi installer**.

The **.msi installer** file contains instructions about installing and removing an application and an installation wizard that will automatically install TestNav.

3. Select the downloaded file or save and open, if required by your browser.

The **Open File - Security Warning** appears with a message asking if you want to run the TestNav file.

4. Select **Run**.

5. Select **Finish**.

Run the TestNav App Check.

Download TestNav on Windows - Option 2

1. Go to <http://download.testnav.com>.
2. Select the Microsoft Store button from the TestNav Download page or go to the Microsoft Store and search for TestNav.
3. Select **Get in Store app** (or **Install**, if you previously downloaded TestNav on the same device).
4. TestNav will begin downloading.

Run the TestNav App Check.

Download TestNav on macOS

1. Go to <http://download.testnav.com>.
2. Select **Download TestNav for another platform**.
3. Select the **OS X/macOS** installer.
4. Select the file that downloaded.
The **TestNav install** window appears.
5. Drag the TestNav icon into the Applications folder.
6. Eject the TestNav installer from Devices in the Finder sidebar or from the desktop.

Run the TestNav App Check.

Note: For macOS, you must grant TestNav full privacy & accessibility control to administer secure tests. Click or tap System Preferences > Security & Privacy > Privacy. Scroll to Accessibility, and add or select TestNav.

Download TestNav on iPadOS

1. Launch the App Store from the iPad device.
2. Search for "TestNav."
3. Select "GET."
4. After the app installs, select "OPEN."
5. Select "OK" to allow TestNav access to the microphone.
6. Select "OK" to allow TestNav access to the camera.
You will see the message: "Preparing iPad for testing. This will take a few minutes."
7. After setup completes, select the app to launch TestNav.

Note: For certain features, TestNav requires access to the iPad microphone and camera. To ensure an uninterrupted testing experience, permission to use the microphone and camera must be granted. (ACT tests do not access the camera. The microphone is only used if testing with the Speech-to-Text accommodation.)

Run the TestNav App Check.

Download TestNav on Chromebooks

1. Sign in to the Google Admin console for your domain, using your administrator account (does not end in @gmail.com).
2. From the Google Admin console home page, go to **Devices > Chrome**.
3. Select **Apps & extensions**.
4. Select **Kiosks**.
5. On the left, select the top-level organization for which you want to configure settings. Then, select a child organization, if necessary.

Note: Your Admin console may differ slightly.

6. Select **Add** and select **Add from Chrome Web Store**.

Note: Do not add TestNav from Google Play. Google Play contains TestNav for Android and not for ChromeOS.

7. Search for TestNav and select **Select**.
8. If prompted, accept the app permissions.
9. In the panel on the right, set the app and extension policies.
10. Select **Save**.

Run the TestNav App Check.

Locate TestNav Version Number

1. If you see "Where do you want to go?" at the top of your screen, go to step two. If not, select the person icon in the upper right-hand corner and select **Choose a different customer**.
2. Locate the small gray text at the bottom of the screen.
The version number is located at the end of the second row of text.

TestNav App Check

The TestNav App Check tool contains two components:

1. **App Check** – Used to verify that the testing device is able to securely lock down, access test content, write to save locations, and submit responses to the online testing servers.
2. **Network Check** – Used to evaluate network performance based on the number of simultaneous testers expected during the administration.

It is recommended that the TestNav App Check is run on every examinee device in the organization.

Running the App Check will confirm TestNav's ability to enter full screen or "kiosk" mode and check connectivity to the online testing servers.

It also checks the testing computer for the following enabled features that need to be disabled:

- The ability to save multiple items in the Cloud Clipboard

- The ability to sync across devices in the Cloud Clipboard
- Airplay screen-saving

Run the TestNav App Check

Set up TestNav on each examinee device before running the App Check. For Chromebooks, open them in kiosk mode (open the app without logging in to the Chromebook) for the TestNav App Check to work.

1. Select the TestNav shortcut on your desktop or go to the **Start** menu and select All Programs, Pearson, and then **TestNav**.

The **Customer Selection** screen appears.

2. Follow the appropriate next step.
 - If you administer only the ACT, select **The ACT** from the list.
 - If you administer more than one product using TestNav, go to the **User** drop-down, and select **Choose a different customer**, and then select **The ACT** from the list.
3. Select the **User** drop-down, and then **App Check**.
4. Leave the Configuration Identifier field blank and then select **Run App Check**.

Note: When starting a test that requires kiosk mode, an examinee should enter a username and password to sign in. The examinee will receive a "Confirm App Self Lock" message. They must select **Yes**. If they select **No**, they cannot continue testing in the secure test.

A green success message will appear if the system passed, or a red failure message will appear if the system failed.

Run the Network Check via TestNav App Check

1. Select the TestNav shortcut on your desktop or go to the **Start** menu and select All Programs, Pearson, and then **TestNav**. The **Customer Selection** screen appears.
2. Follow the appropriate next step.
 - If you administer only the ACT, select **The ACT** from the list.
 - If you administer more than one product using TestNav, go to the **User** drop-down, and select **Choose a different customer**, and then select **The ACT** from the list.
3. Select the **User** drop-down, and then **App Check**.
4. Select **Run Network Check**.
5. Select the number of computers you plan to administer a test on and select **Start Diagnostics Test**.
6. Your test results will display on screen.

Note: The best way to ensure that you can successfully test is to run a Mock Administration. To complete the mock administration, refer to the Mock Administration Guide for instructions and use the PearsonAccess^{next} training site found at <https://training.testadmin.act.org>.

Freezing the Test Environment

Once the test environment is configured for TestNav, "freeze" the configuration until online testing is finished at the organization. This is not something that is done in PearsonAccess^{next} or TestNav, instead it is completed locally. Freezing the configuration means that all devices used for testing need to be administrator controlled during this time—no software of any sort should be downloaded or updated, including operating system updates. If the test environment must be updated before testing, or between testing windows, please rerun the TestNav App Check and "refreeze" the test environment.

Using Saved Response and Log Files

Information about **saved response files**, **log files**, save locations, and storing the information in PearsonAccess^{next}. TestNav will send responses directly to Pearson servers and will create an saved response file (SRF) which is an encrypted file saved to the testing device, and exit the student from the test IF it is unable to send the response(s) to Pearson servers. Students should be resumed on the original testing device once connectivity is restored and the SRF will automatically upload to Pearson servers.

Understanding SRF and Log Files

When an examinee responds to a question, TestNav saves the response in a SRF and sends these responses to the Pearson server. After the responses successfully save to the server, TestNav deletes the SRF from the local computer. If the response does not save to the server, the SRF preserves the response on the local computer. TestNav will send responses directly to Pearson servers and will create an SRF which is saved to the testing device and exit the student from the test IF it is unable to send the response(s) to Pearson servers. Students should be resumed on the original testing device once connectivity is restored and the SRF will automatically upload to Pearson servers.

TestNav also writes to a log file during the test session. The log file helps to troubleshoot issues if they occur.

Save Locations for TestNav—Windows and macOS

The saved response files will automatically save to the default location. The log file save location cannot be changed.

Table 5: Default Save Locations

Operating System	SRF Location	Log File Location
Windows	{USER.HOME}\Pearson\srf\	{USER.HOME}\Pearson\logs\
Mac OS X	{USER_HOME}/Pearson/srf/	{USER_HOME}/Pearson/ logs/

Save Locations for TestNav—iPad OS

You can find SRF and log files two ways on iPads, using Safari or a USB cable.

1. Find SRF and log files using Safari:
 - a) Open Safari and enter the url: <testnav://admin>.
The first time you access this url, a dialog asks if you want to open in TestNav.
 - b) Select **Open** to open TestNav.
 - c) Select **View Logs** or **View Student Responses**
 - d) From this screen, you can view and email SRF and log files.
 - e) Select the **Home** button when finished.
2. Find SRF and log files using USB:
 - a) Connect the iPad to the computer using a USB cable.
 - b) Start iTunes, version 9.1 or later.
 - c) Select **iPad** from the listed devices in the iTunes window.
 - d) Select the **Apps** tab and then scroll down to the bottom of the page.
 - e) View the list of apps currently installed on the iPad under **File Sharing**.
 - f) Select the **TestNav** app.
A list of TestNav log files displays under **TestNav Documents**.
 - g) Select and open the SRF or log file you want to view.

Save Locations for TestNav—Chrome OS

For the Chrome OS, the default saved response file and primary save location is on the local device.