Pearson
Technology Coordinator Training

Technology Setup and Readiness

February 4, 2021

ILLINOIS
Assessment of Readiness

Agenda

What's New?

Components of Online Testing

Infrastructure Trial

Set Up: PearsonAccess^{next}

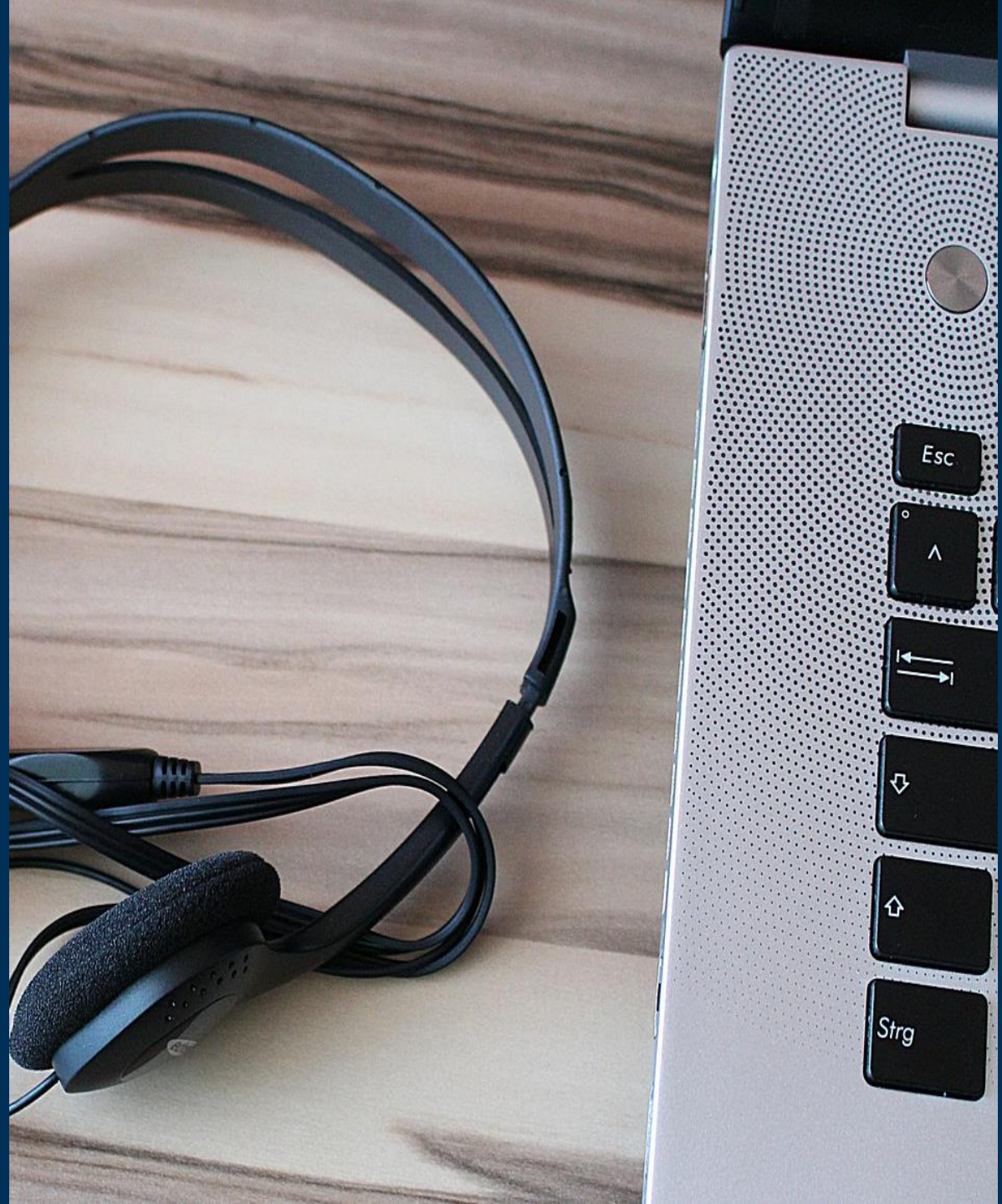Questions and Discussion

Support

What's New?

New items for this testing season:

- App versions

- TestNav System requirements

- ProctorCache updates

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New Apps – OS Updates

TestNav System Requirements

TestNav Apps – Requirements

When necessary for some tests, TestNav apps can run in **kiosk mode**, which prevents students from accessing any other web pages or applications while testing.

Devices/OS	Supported Versions	Download TestNav	Setup Instructions
Tablets, Chromebooks, Chromeboxes			
Android	9.x For info on Android, see TestNav - Android App and Secure Testing	From Google Play	Set Up TestNav on Android
Chrome OS	83-87	From Chrome Web Store	Set Up TestNav on Chrome OS
iOS	12-14.x	From the App Store	Set Up TestNav on iOS

Laptops, Desktops			
Linux	Fedora 28 (64-bit); Ubuntu 18.04 (64-bit)	From TestNav downloads	Set Up TestNav on Linux
OS X/macOS	10.13-10.15	From TestNav downloads	Set Up TestNav on OS X, macOS
Windows	7, 8.1, 10* (includes Windows Store app)	From TestNav downloads or Windows Store	Set Up TestNav on Windows

*Build version 17763.107 or higher

ProctorCache System Requirements

Windows Server 2008, 2012, 2016, or 2019

Windows 7, 8, or 10

[Technology Setup Site](#)

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New Apps – Hardware Requirements

TestNav System Requirements

RAM Requirement – no changes

MacOS, OS X, Windows
- Minimum RAM - 2 GB
- Recommended RAM - 4GB

iOS
- Minimum RAM - 1 GB
- Recommended RAM- 2GB

Chrome OS and Linux
- No updated RAM requirements

ProctorCache System Requirements

RAM Requirement – no changes
- Minimum RAM – 2GB
- Recommended RAM - 4GB

Processor Requirement – no changes
- Minimum 2GHz processor

Hardware Requirements

Requirement	Details
Processor	x86/x32 and x64 or Intel-based™
Memory	4 GB RAM; *Minimum - 2 GB RAM*
	• *Linux and iOS - 2 GB RAM; Minimum - 1 GB RAM*
Screen Size	9.5-in
Resolution	1024 x 768
Other	• External keyboard and mouse (or touchpad) for touchscreen devices • Android, Windows (*required*) • iOS (*recommended*) • Local File access to home directory • OS X, macOS • Windows • Wired keyboards (*recommended*) • Convertible Chromebooks - **no tablet mode**

Hardware Requirements

| Specifications	Windows
Processor	x86/x32 and x64 **Minimum** 2 GHz
Memory	**Recommended** 4 GB RAM **Minimum** 2 GB RAM

Software Requirements

- Windows Server 2008, Windows 7, Windows Server 2012, Windows 8, or Windows 10, Windows Server 2016

TestNav 8 Download Page

The TestNav 8 Download Page:
- Automatically detects Mac and Windows operating systems.
- Houses new installation files for TestNav and Windows version of ProctorCache.
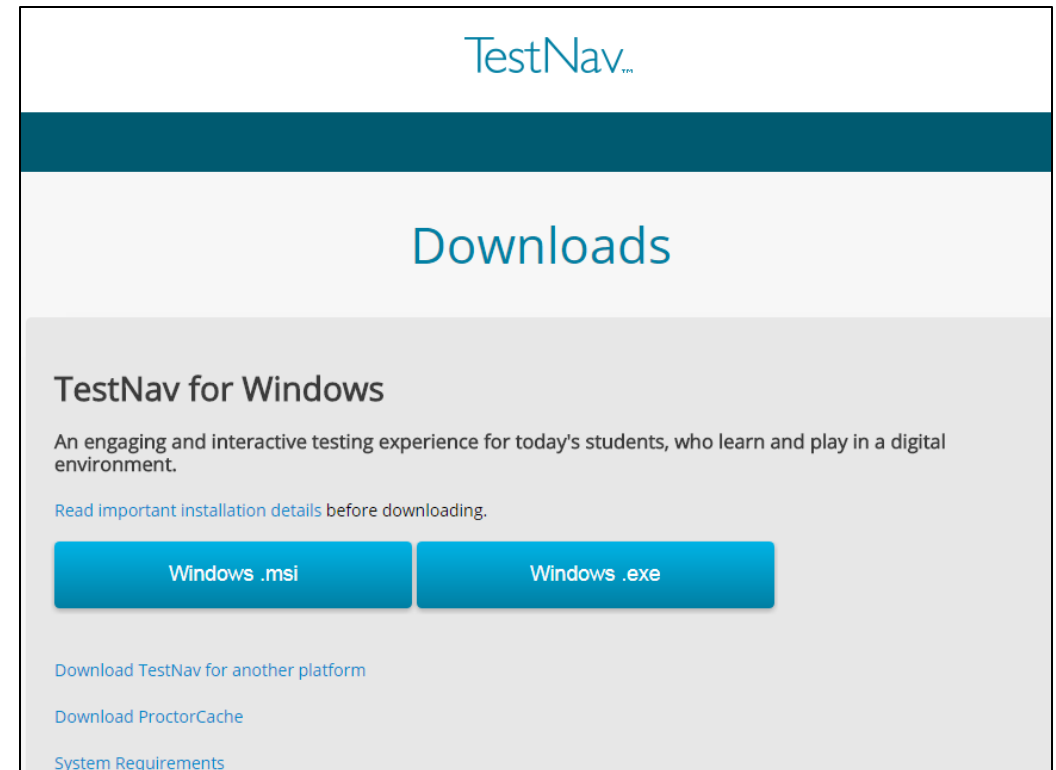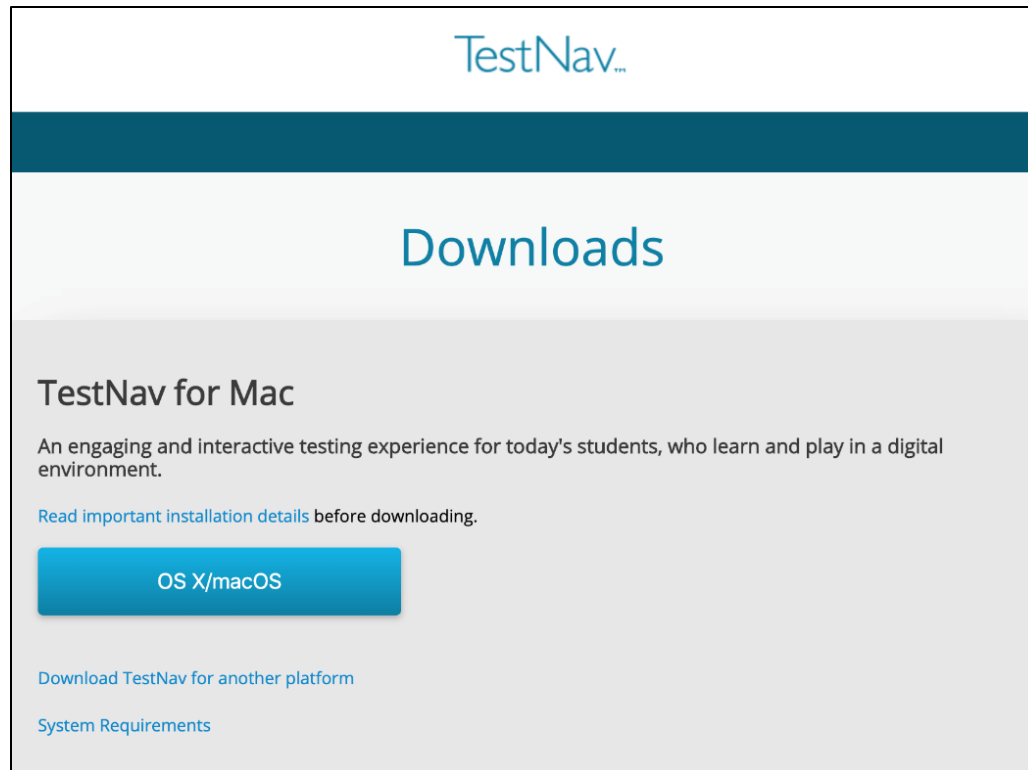
ProctorCache Download

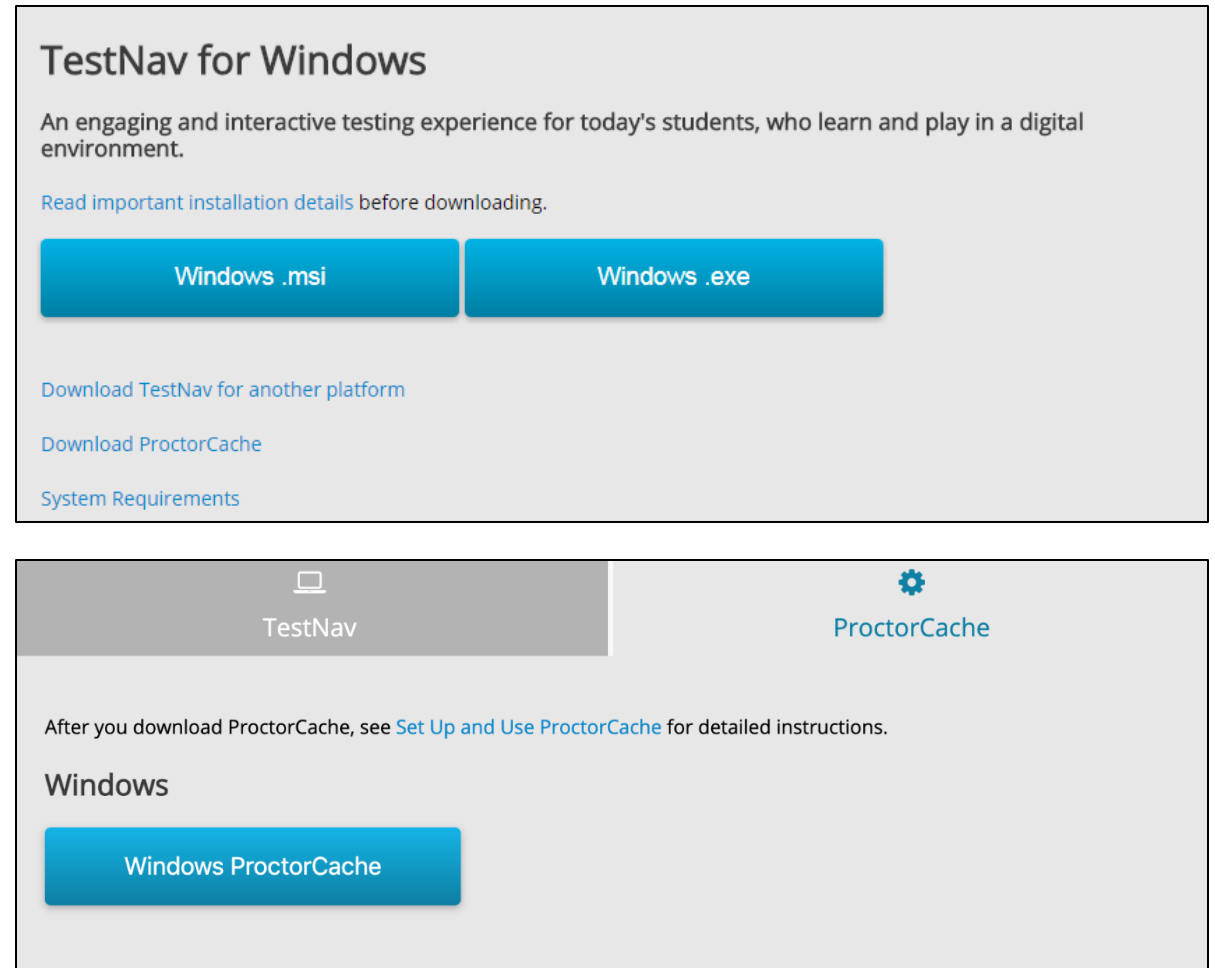## ProctorCache Installers

Windows ProctorCache Installer
To download ProctorCache for supported Windows devices visit:
Download TestNav.

Simply choose between your preferred installation method, as seen in the image to the right, either .msi or .exe files.

MacOS Installer
The legacy MacOS version of ProctorCache will still function for Spring 2021.
- Contact Customer Support if you require the legacy MacOS installer.

TestNav for Windows

An engaging and interactive testing experience for today's students, who learn and play in a digital environment.

Read important installation details before downloading.

Windows .msi	Windows .exe

Download TestNav for another platform

Download ProctorCache

System Requirements

TestNav	ProctorCache

After you download ProctorCache, see Set Up and Use ProctorCache for detailed instructions.

Windows

Windows ProctorCache

Components of Online Testing

Pieces of the puzzle

- TestNav 8

- ProctorCache

- Infrastructure and the Training Center

- PearsonAccess[next]
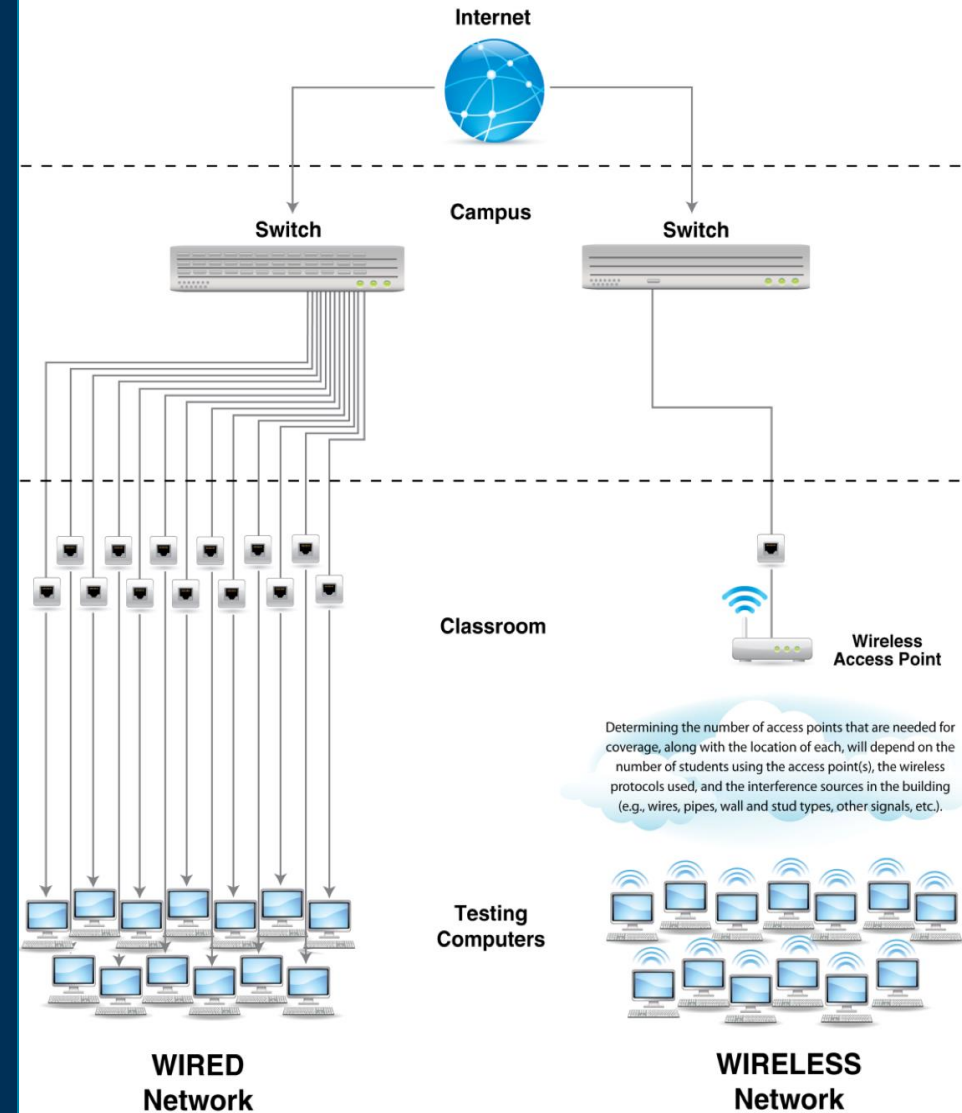
Online Testing Components

- TestNav 8
    - Delivers test content and allows student interaction.
    - Maintains and transmits student responses.
    - Early Warning System (EWS)
    - AppCheck

- ProctorCache
    - Allows test content to be stored locally.
    - Reduces bandwidth usage.
    - Not required – verify with Infrastructure Trial

- PearsonAccess[next]
    - Administrative site
    - Set up test sessions, manage live testing
    - Some essential technology specific functions
    - Training Center for Infrastructure Trial

TestNav 8
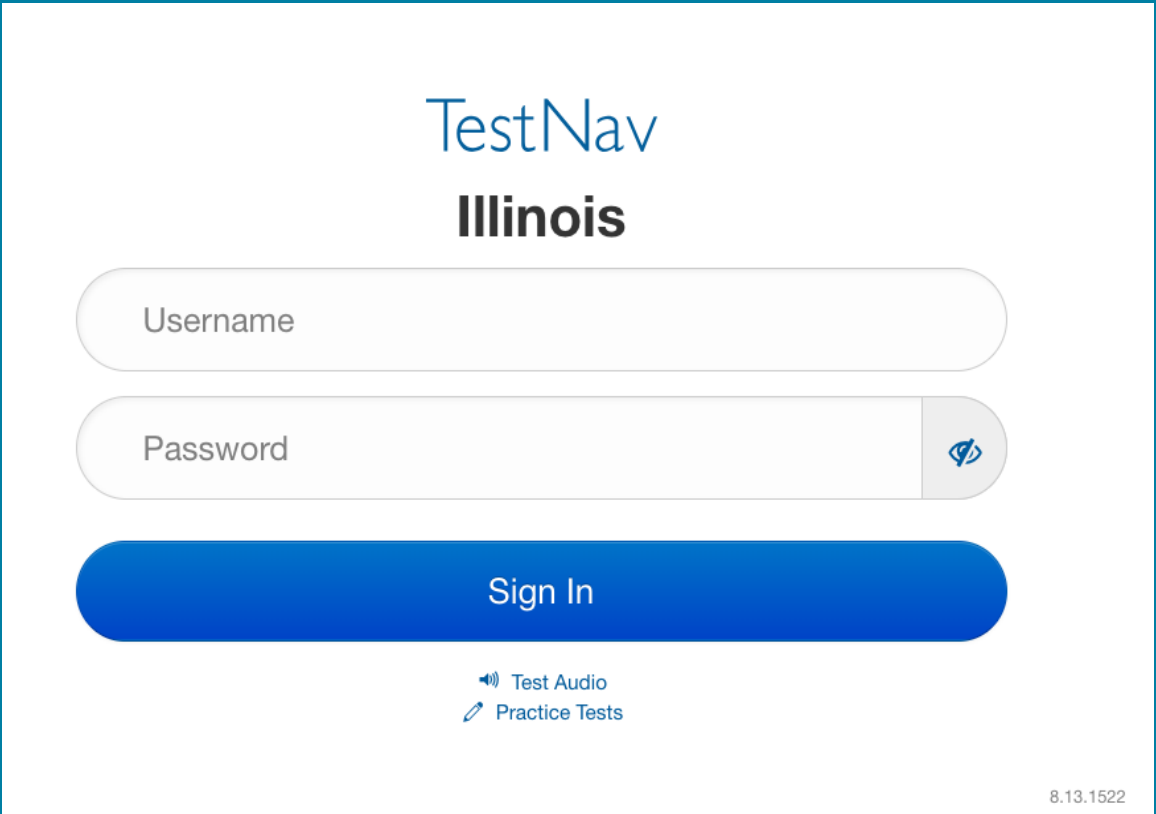
ProctorCache

PearsonAccess[next]

TestNav 8 – Overview

TestNav 8 is an installable test client that:

- Is supported on ChromeOS, MacOS, iOS, Linux and Windows devices.

- Requires minimal setup and configuration.

- Has built in tools such as:
  - AppCheck.
  - Early Warning System (EWS).

TestNav 8 – Delivery Methods

TestNav 8 is delivered through a device specific application.

- There are specific apps for each supported platform.

  [Set up and use TestNav](#)

  Set Up TestNav on OS X, macOS
  Set Up TestNav on Windows
  Set Up TestNav on Linux
  Set Up TestNav on Chrome OS
  Set Up TestNav on iOS

- Setup and configuration
  - Device specific setup steps
  - Install TestNav
  - Configure network infrastructure

TestNav 8 – EWS – Overview

The Early Warning System (EWS) is a background process built into TestNav that:

- Monitors background applications and connectivity.

- Stages and transmits student responses.

NOTE: If an error is detected, a message will be displayed on the student workstation screen prohibiting the student from testing until the error is resolved. (If errors persist, please write down the number associated with the error and contact Customer Support for further assistance. Ex. **1005**)

No saved response file found

Message 1005

Your previous exit from TestNav was abnormal, so a saved response file (SRF) is expected.

Please browse to a response file and upload it.

Response file name: 2a945d1a-e55d-4caa-8530-43daee88e54c.SRF

Response File Location: [   ] [Browse]

[Upload Response File]

If you are unable to locate the response file, contact support.

To go to the test without uploading an SRF, choose Skip Upload. This may result in lost responses.

[Skip Upload] [Exit Test]

TestNav 8 – EWS – Student Responses

While a student is testing, the Early Warning System (EWS) stages responses before transmitting them to the Pearson servers.

- Responses are written to an encrypted Saved Response File (SRF).

- After a few responses are recorded, those are sent in a package to the Pearson servers.

- TestNav listens for a confirmation message of successful transfer.

- When a confirmation is received, the SRF file is erased and a new file is created.

- If no confirmation is received, responses are retained in the SRF file until the next transmission cycle.
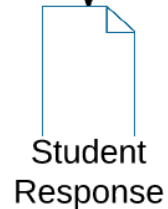
TestNav 8
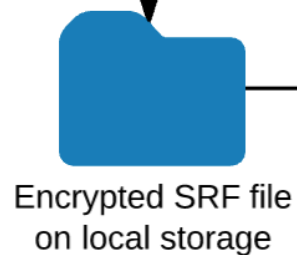
Student Response

Encrypted SRF file on local storage
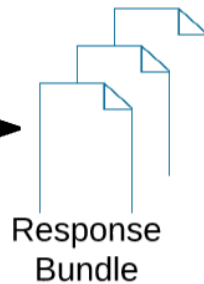
Response Bundle

School Network Security

Internet

Pearson Servers

Pearson

TestNav 8 – EWS – Error Codes

If an EWS message is displayed, it will contain a specific error code and prevent the student from continuing their test until the error has been resolved.

Complete error code documentation can be found on
TestNav 8 Online Support - TestNav 8 - Pearson Assessment Support.

A numeric error code is usually accompanied by a description of the error and potential resolution steps.

3005	TestNav has detected that another application attempted to become the active window, which may compromise the security of this test. TestNav has been shut down. You may need assistance from your test monitor to restart the test.	The student test session has been terminated. The test administrator must resume the student's test.
8029	The installed app is out of date and needs to be updated in order to use TestNav on this device.	Download and install the latest version of the app.

TestNav 8 – EWS – Triggers

Even though there are many types of error codes, the majority of the potential causes can be traced back to a few main scenarios.

1. Connectivity
   - Unable to retrieve content
   - Unable to transmit responses

2. Saved Response File
   - Unable to write or read to SRF location

3. Potential Security Issues
   - Application/Notification launches while TestNav is in kiosk mode
   - Running applications in the background

No saved response file found

Message 1005

Your previous exit from TestNav was abnormal, so a saved response file (SRF) is expected.

Please browse to a response file and upload it.

Response file name: 2a945d1a-e55d-4caa-8530-43daee88e54c.SRF

Response File Location: [   ] Browse

Upload Response File

If you are unable to locate the response file, contact support.

To go to the test without uploading an SRF, choose Skip Upload. This may result in lost responses.

Skip Upload | Exit Test

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ProctorCache – Overview

ProctorCache is a Pearson supplied software that allows you to pre-download encrypted test content early and distribute it to TestNav during test time.

- Download (cache) test content

- Serves content at local area network speeds

- Eliminates redundant downloads of test content

- Low minimum system requirements and simple setup

Set Up and Use ProctorCache - TestNav 8 - Pearson Assessment Support

ProctorCache – Overview
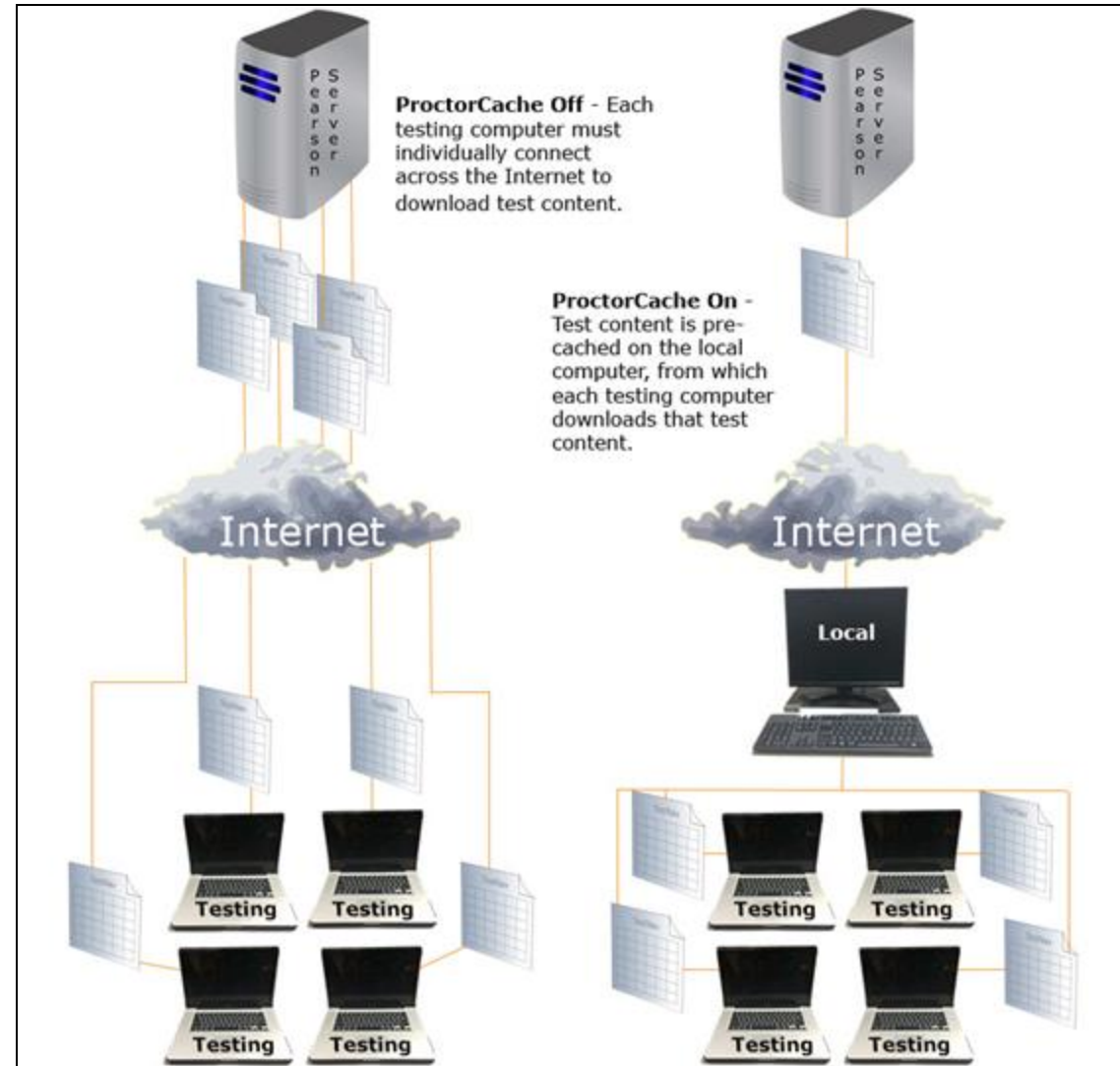
ProctorCache – Administration

The ProctorCache service can be accessed through an administration page with the following three main tabs:

- **Tests –** View the status of cached test content.

- **Clients –** View information about clients connecting to the ProctorCache machine to gather test content.

- **Settings –** Change the default ProctorCache password.

ProctorCache – Tests Tab

ProctorCache – Tests Tab

ProctorCache – Clients Tab

ProctorCache – Settings Tab
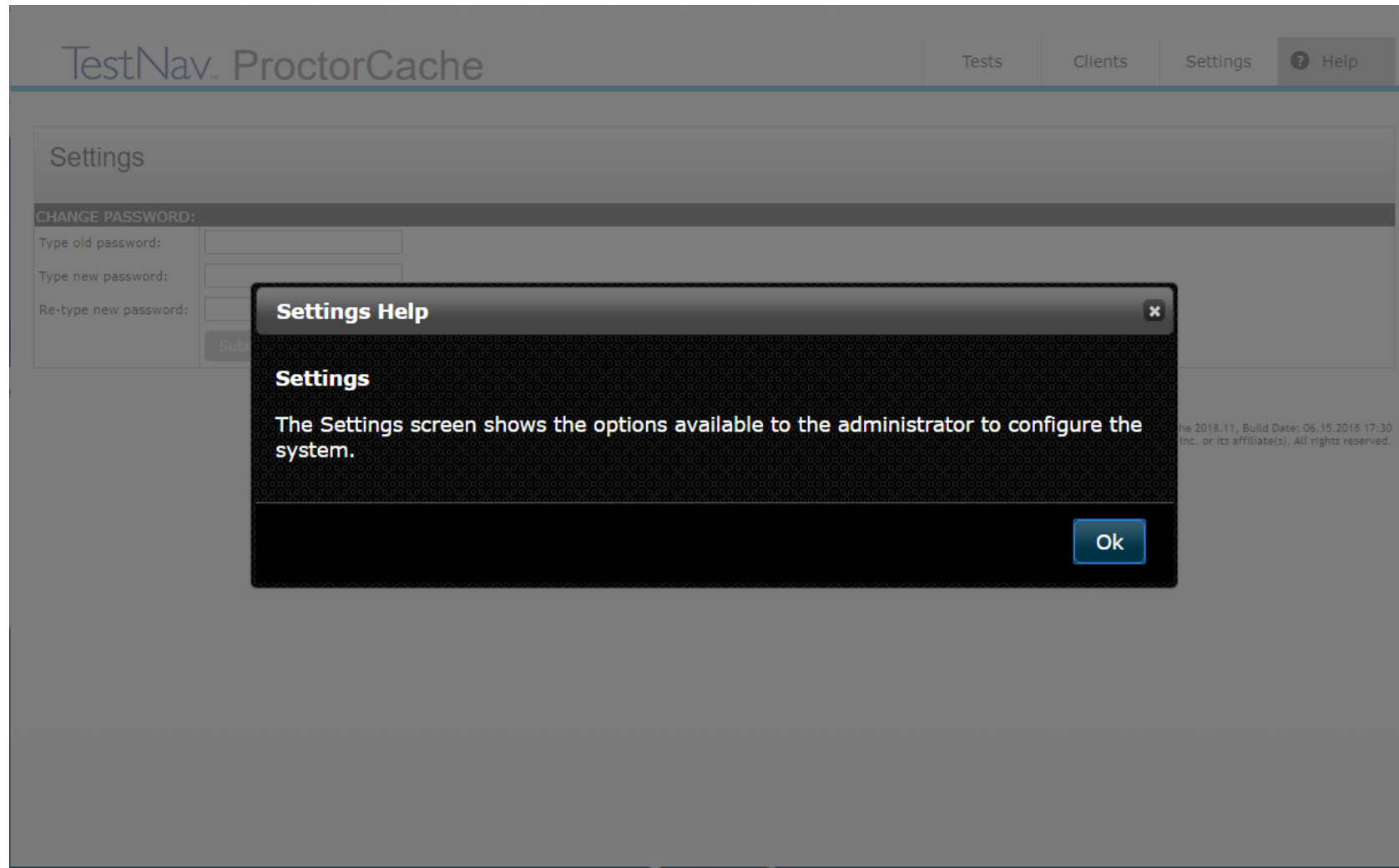
ProctorCache – Purging Content

If ProctorCache has been used in previous administrations, all cached content should be purged from the system before updating or caching new content.

- Navigate to the ProctorCache administration page.
- Select any old content.
- Press the 'Purge' button.
- Enter the default ProctorCache password –(**t35t1n6**).
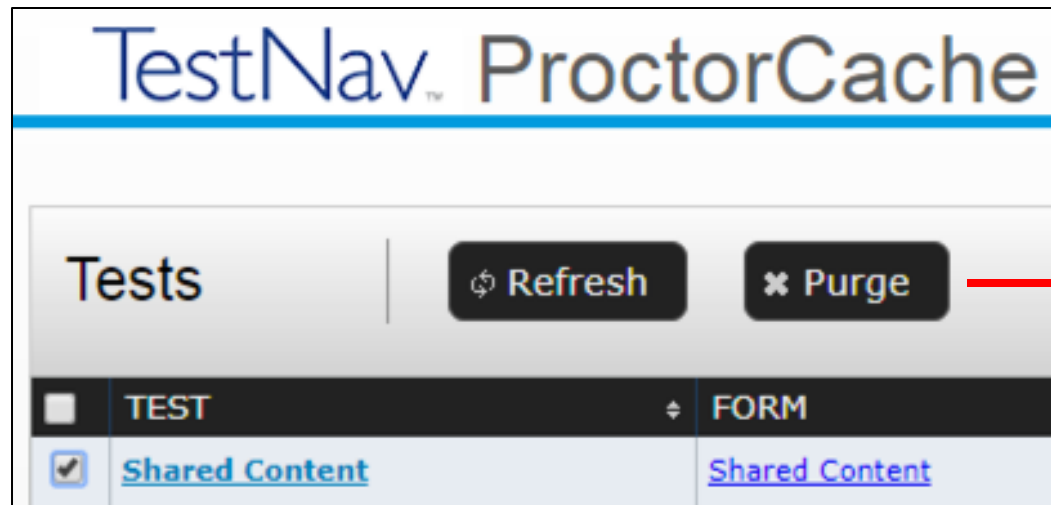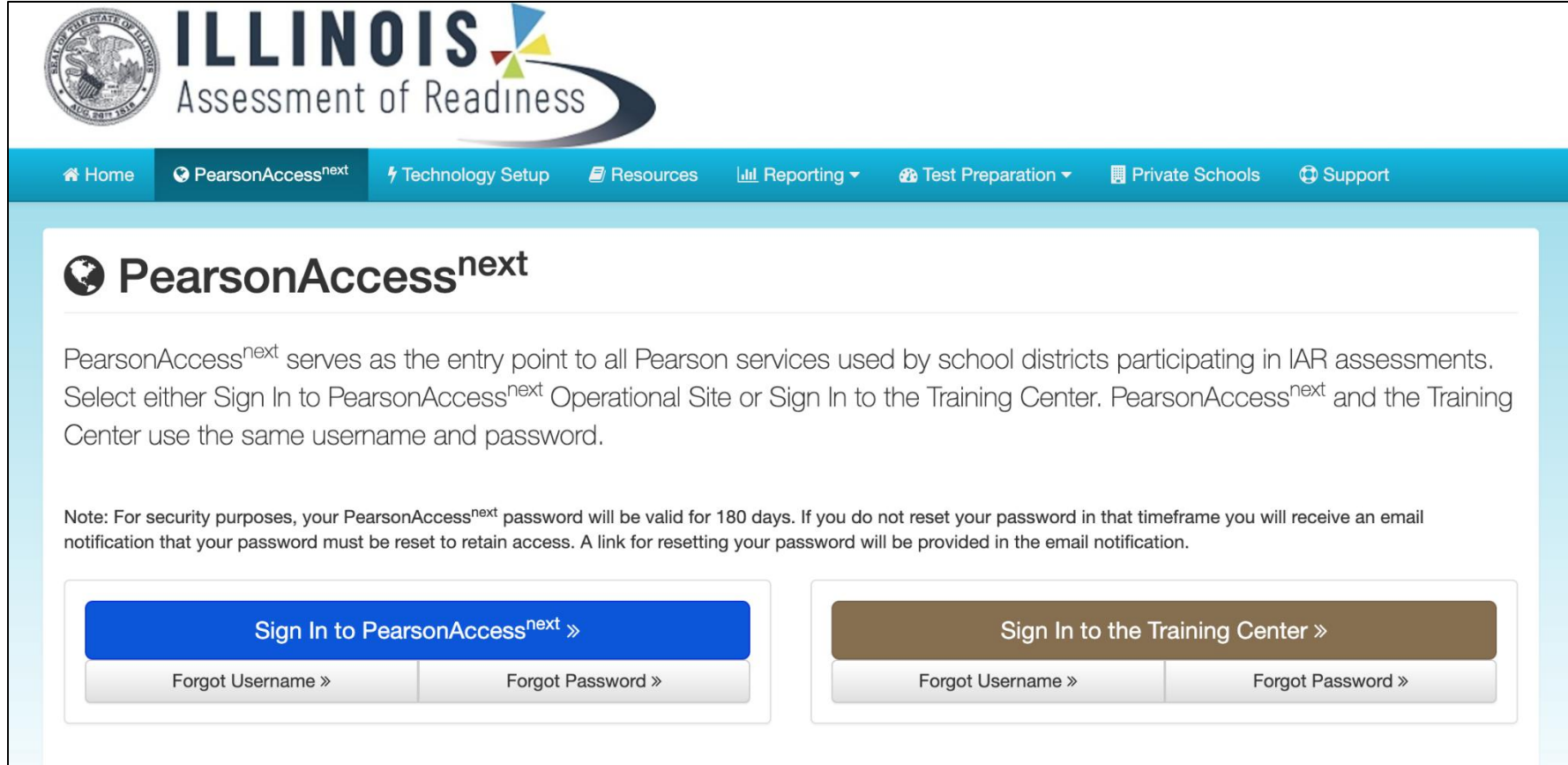
Working Together
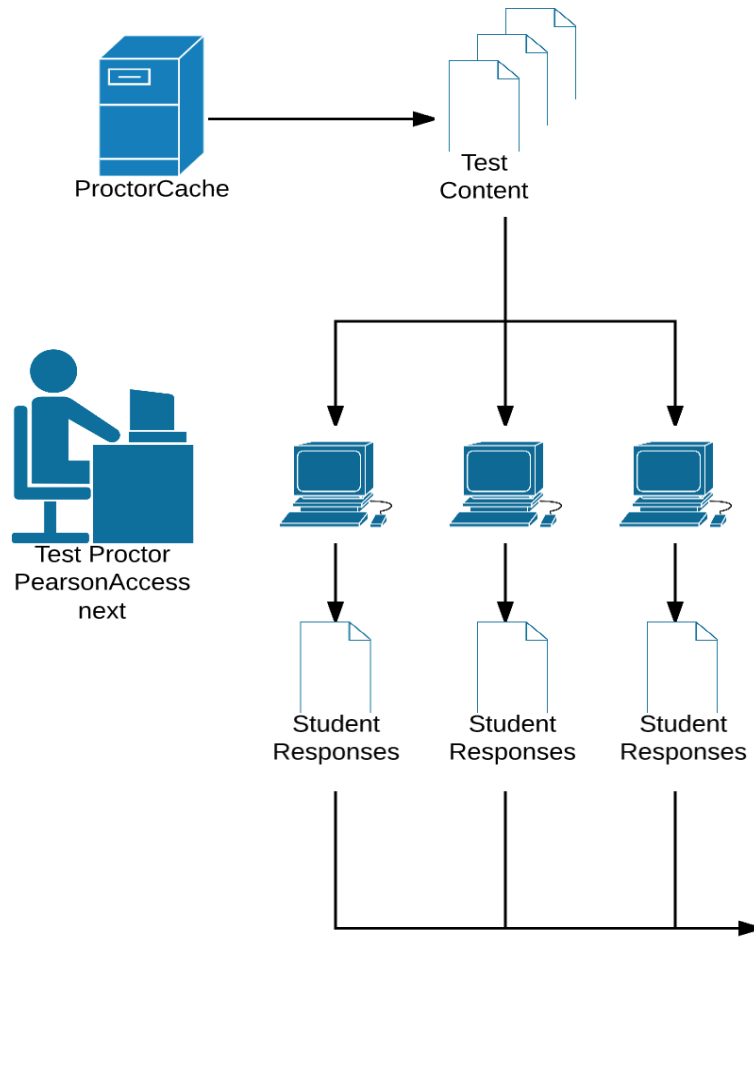
- Test Proctors manage test sessions in PearsonAccess^{next}.

- Test devices gather content from ProctorCache machine.

- Student responses are periodically transmitted to Pearson servers.
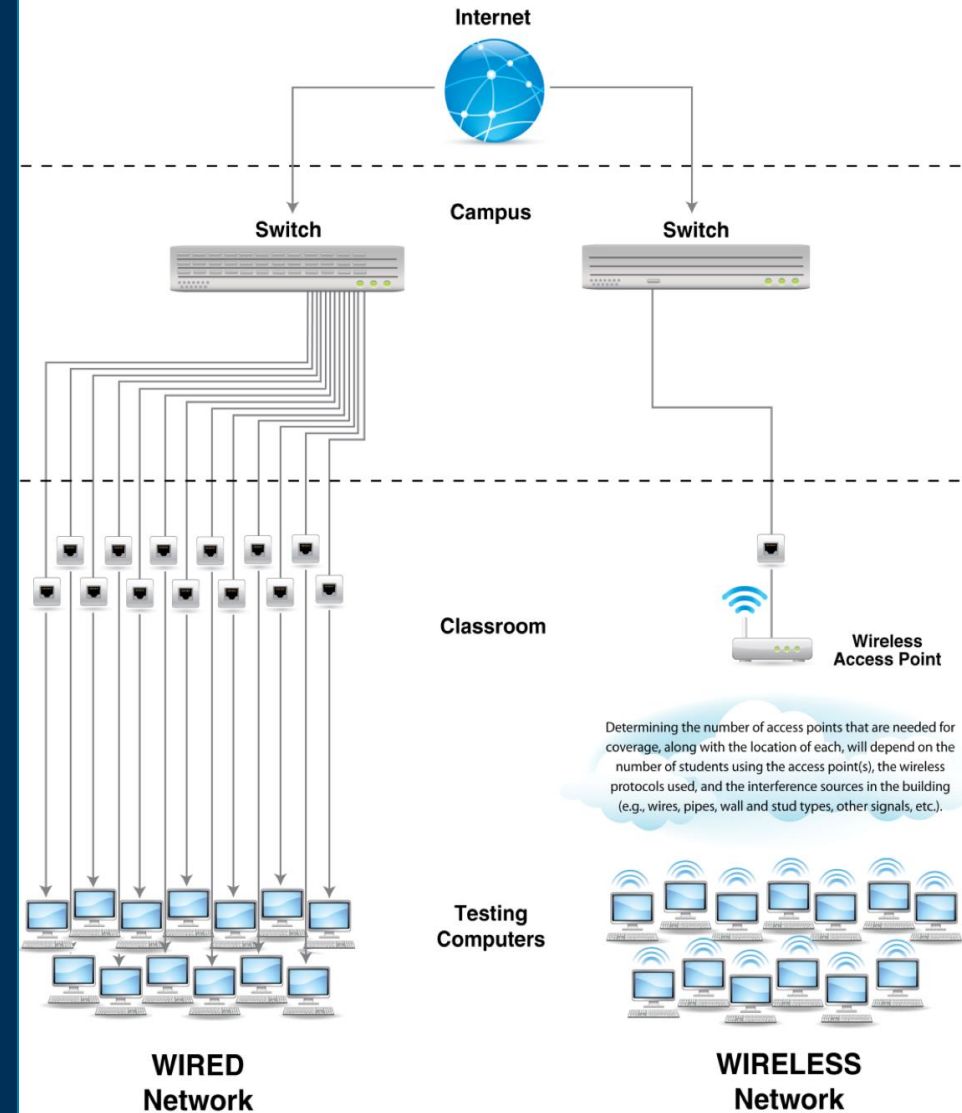
PearsonAccess^next^ - Overview

The **Blue** site for Live test
Administration.

The **Brown** site for Infrastructure
trial Administration.

Infrastructure Trial

Test your setup

- Why do it?

Infrastructure Trial – Why do it?

An **Infrastructure Trial** is a test run of your online testing. It does not use real student information and is completed in the **brown** PearsonAccess^next Training site.

This is a low-stakes, trial run/practice test for confirmation that:

- TestNav is configured correctly.

- Devices can successfully run TestNav.

- The network has been properly configured.

- Students are familiar with the computer-based tools and format.

- Test Administrators understand the controls and how to deliver the test.

- Confirms ability to test without a ProctorCache.

Refer to the Infrastructure Trial Readiness Guide.

Refer to the Infrastructure Trial Webinar.

ProctorCache Bandwidth Recommendations for ProctorCache & Infrastructure Trial

Network Bandwidth (per second/per student)	ProctorCache Recommendation	Infrastructure Trial Information
1000 Kbps (1.0 Mbps) or greater	You will likely **not** need to cache test content.	School staff should still perform an infrastructure trial for the schools with the least bandwidth to verify that tests can be successfully delivered without the use of Proctor caching. ISBE recommends that all schools going without Proctor caching conduct infrastructure trials early to verify that that student tests can be downloaded and delivered without issue.
>500 Kbps < 1000 Kbps (1.0 Mbps)	School staff may choose to deliver the assessments without ProctorCache.	School staff should conduct infrastructure trials at the school and simulate the maximum number of concurrent test takers who will test during the window.
>100 Kbps < 500 Kbps	The school's network is a marginal candidate for delivering the assessments without the aid of ProctorCache.	School staff should conduct infrastructure trial that simulates 120% of the maximum number of concurrent test takers who will test during the window.

ProctorCache Decision Tree

Set Up: PearsonAccess^{next}

- TestNav configuration
- Caching content
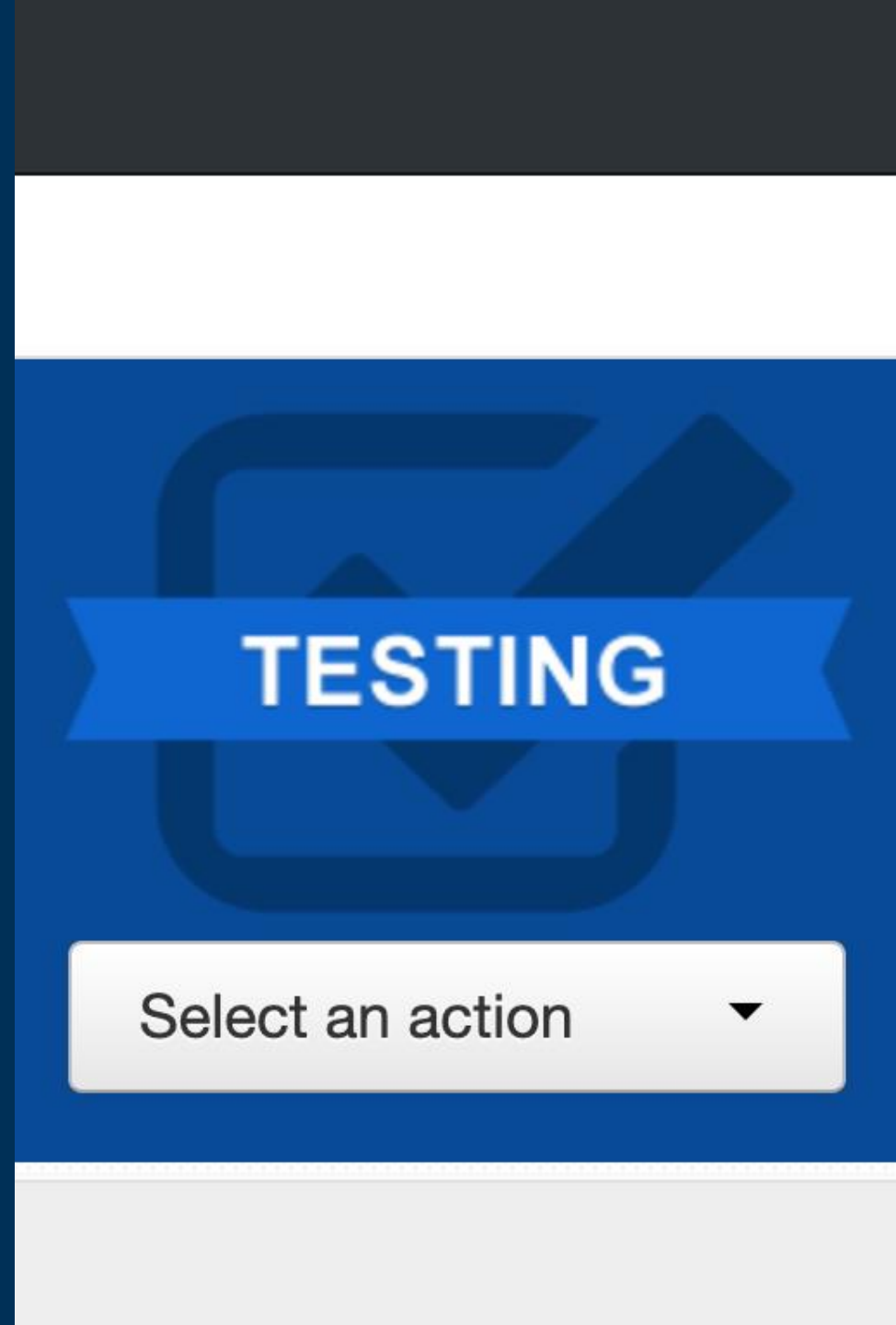
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Technology Tasks

Technology staff will have the **Technology Coordinator** role in PearsonAccess^{next} and will be responsible for creating TestNav configurations.

TestNav configurations:

- Formally identify ProctorCache machines (if applicable).

- List primary and secondary Save Response File (SRF) locations.

- Should be created before test sessions are created and must be created before caching.

Note: Required fields are indicated with a **red** asterisk (*****). These fields must be populated whether using caching or not.

TestNav Configuration

To Create a TestNav configuration:

1. Enter a configuration name.

2. Select the organization(s) that will use the configuration.

3. Enter a ProctorCache computer name (*Required for Secondary Save Location*).

4. Enter the ProctorCache computer's **static IP** address.

5. Enter the ProctorCache computer's port (4480 is the default).

Note: If choosing not to use ProctorCache, enter No Cache under Computer Name and leave the IP Address and Port fields blank.

Configuration Name*

☐ Precaching Computer Override ❶

Organizations*

Select

Default Precaching Computer

Computer Name*

IP Address

Port

Note: Confirm that firewall or content filtering software is open for both ports 4480 and 4481 of the proctor caching computer.

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TestNav Configuration – Save Locations

Set Save Response File (SRF) locations.

- Define different locations by test device
- Define both primary and secondary SRF location for Windows, Mac, and Linux
- Define secondary locations for Android, ChromeOS, and iOS

If you set a network file server as secondary backup location, do *not* use:

- Spaces in the save location path.
- A location that requires authentication. (*If authentication is required, TestNav cannot access the shared location.*)
- A Windows UNC (Uniform Naming Convention) or network path, such as \\ComputerName\SharedFolder\Resource on a Mac or Linux.

Pearson recommends that you specify a mapped drive location, such as:

D:\TopDirectory\NextDirectory\SaveLocation

If using an SFTP server, ensure:

- The device is turned on, and SFTP services are running.
- That the syntax inside of PearsonAccess[next] is correct. (e.g., **sftp://<userid>:<password>@<address>:<port>/<path>**).
- That neither the **userid** or **password** contain the **@** symbol. This will invalidate the syntax. (e.g., **sftp://fileuser123:pa$$\$w0rd!@192.168.10.12:22/srf**)
- Ensure that the device and SFTP server used for the secondary save location is on during testing.

Response File Backup Locations

Windows, Primary Location ❶
[Use default user directory]

Windows, Secondary Location ❶
[   ]

MAC, Primary Location ❶
[Use default user directory]

MAC, Secondary Location ❶
[   ]

Android, ChromeOS, and iOS Secondary Location ❶
[   ]

Linux, Primary Location ❶
[Use default user directory]
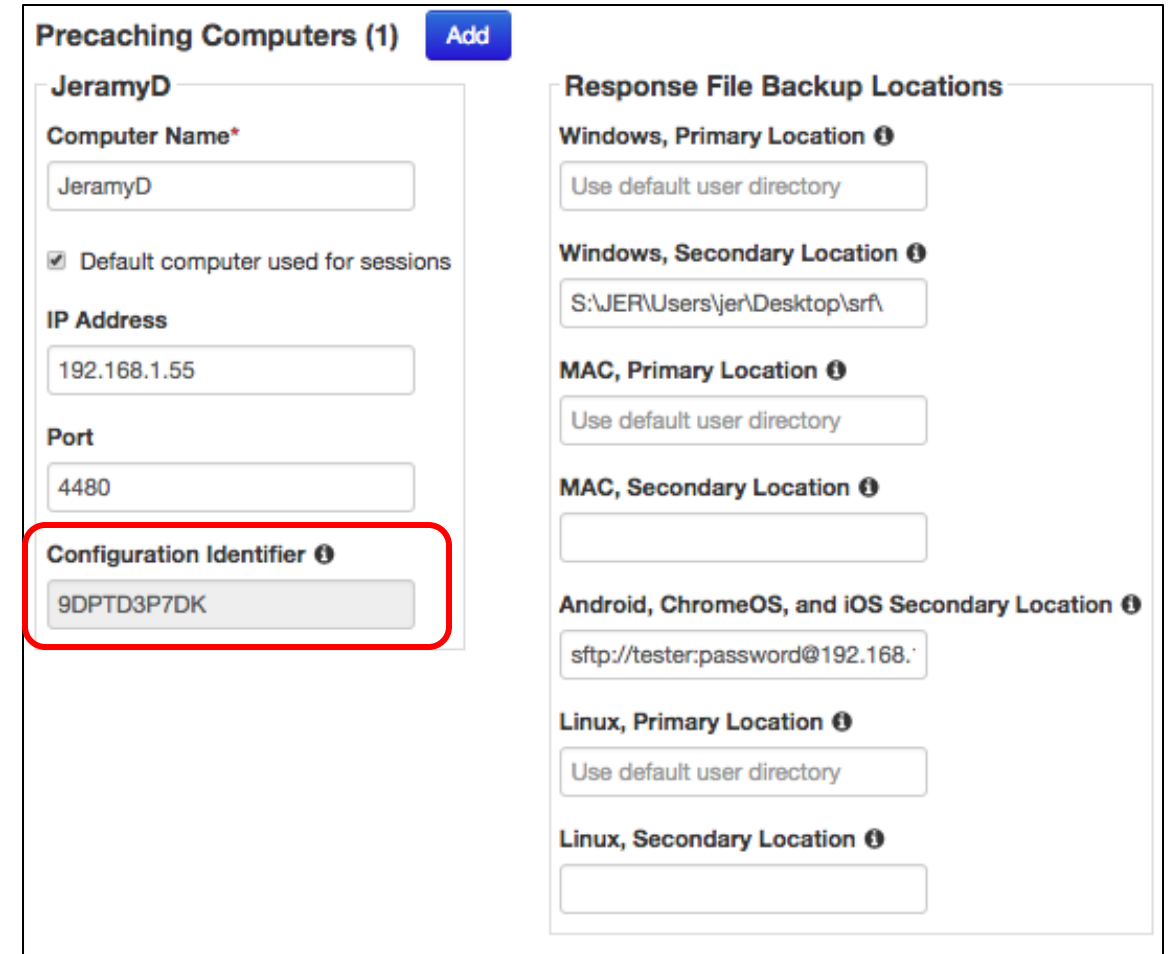
Linux, Secondary Location ❶
[   ]

TestNav Configuration - Configuration Identifier

A unique configuration identifier is created once a configuration is saved.

Use a configuration identifier along with AppCheck to:

- Verify the connection to the ProctorCache computer is successful.

- Verify successful access to SRF locations.
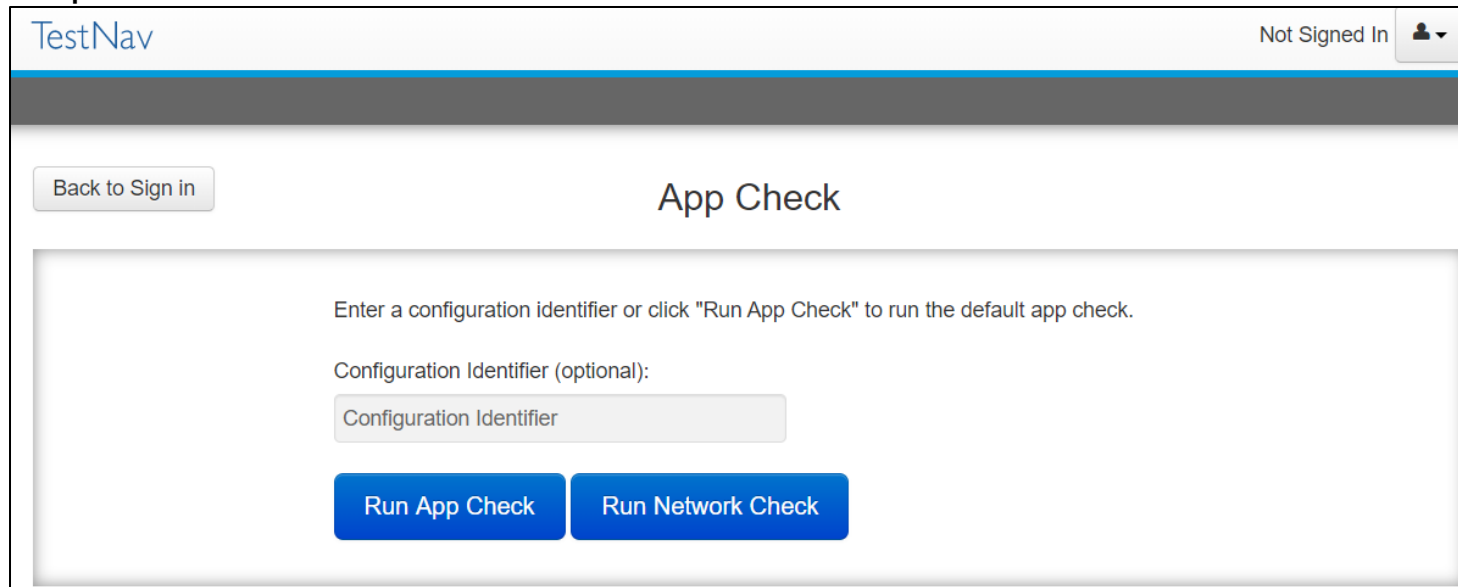
Precaching Computers (1) Add

JeramyD

Computer Name*

JeramyD

☑ Default computer used for sessions

IP Address

192.168.1.55

Port

4480

Configuration Identifier ❶

9DPTD3P7DK

Response File Backup Locations

Windows, Primary Location ❶

Use default user directory

Windows, Secondary Location ❶

S:\JER\Users\jer\Desktop\srf\

MAC, Primary Location ❶

Use default user directory

MAC, Secondary Location ❶

Android, ChromeOS, and iOS Secondary Location ❶

sftp://tester:password@192.168.

Linux, Primary Location ❶

Use default user directory

Linux, Secondary Location ❶

AppCheck

- AppCheck is built into TestNav.

- No additional installation or configuration required.

- It is accessed from the TestNav 8 app menu.

- AppCheck can be completed in around 10 seconds.
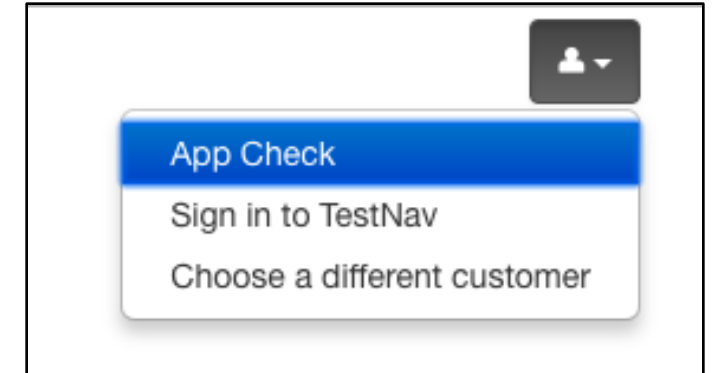
Note: A **configuration identifier** will only generate within PearsonAccess[next] once a TestNav configuration is created. Adding a configuration identifier from the TestNav configuration to App Check will ensure you've successfully configured your ProctorCache machine and/or Save Locations.

TestNav Configuration - Configuration Identifier & AppCheck Working Together

TestNav Network Check

Precache Test Content

The precache process is initialized from PearsonAccess^{next}.

- Precache is available March 8th before the test administration.
- Select content you wish to precache.
- Verify a successful cache by using ProctorCache monitor page, the status will change to "**OK**".
- You only need to cache once.

Import TestNav Configurations

- TestNav configurations created in the **brown** Training site can be imported in to the **blue** Live PearsonAccess[next] site.

- If you created configurations in a previous testing administration, they will carry over, e.g., IAR Spring 2020 configurations.

Import or Export TestNav Configurations

Search the PearsonAccess Next Online User Guide:

[   ] [Search]

This information is a part of Manage Online Tests.

To learn more about proctor caching, see Understand Proctor Caching.

To import or export TestNav Configurations, follow these steps:

1. From **Setup > TestNav Configurations**, search to find configuration(s), or click the down arrow next to the **Search** button and select **Show all results**. Select the configurations(s) you want to edit.
   › Click here to view a screenshot...

2. Click the **Select Tasks** drop-down and select **Import / Export TestNav Configurations**. Click **Start**.
   › Click here to view a screenshot...

3. Click the **Action** drop-down and select **Import** or **Export**.
   › Click here to view a screenshot...

4. Click **Import** or **Export,** as appropriate.

   To avoid a possible timeout, Pearson recommends that you do not import / export over 300 TestNav Configurations at a time.

Resources

IAR Resource Page: Pearson Support Site

Technology Page

TestNav 8 Online Support Page

TestNav 8 Online Support Page (cont.)

The **TestNav 8 Support** page is regularly updated to reflect the most current system requirements, setup steps, network requirements and guidelines, troubleshooting information and more.
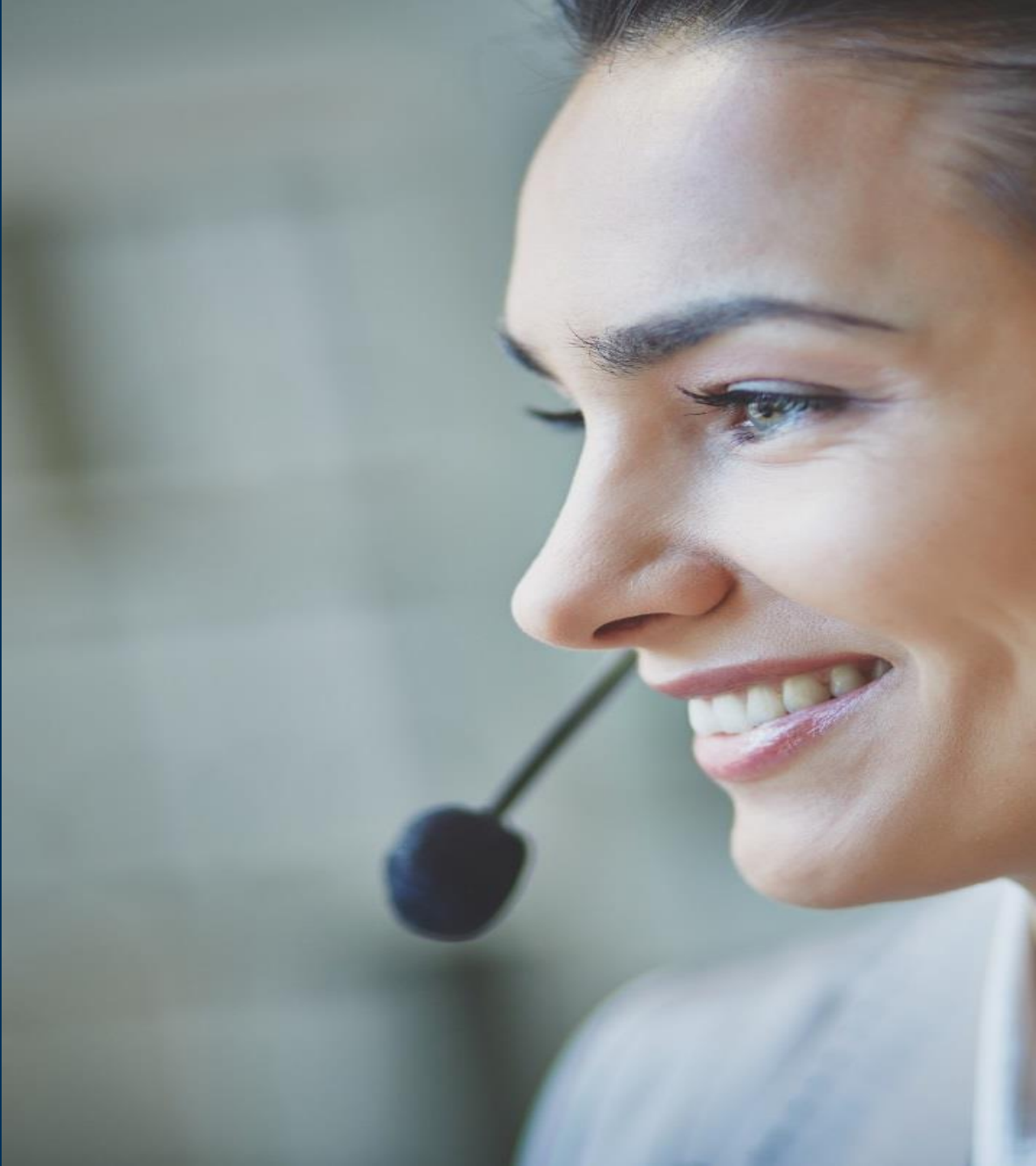
- Make use of the Recently Updated section towards the bottom of the menu on the left.
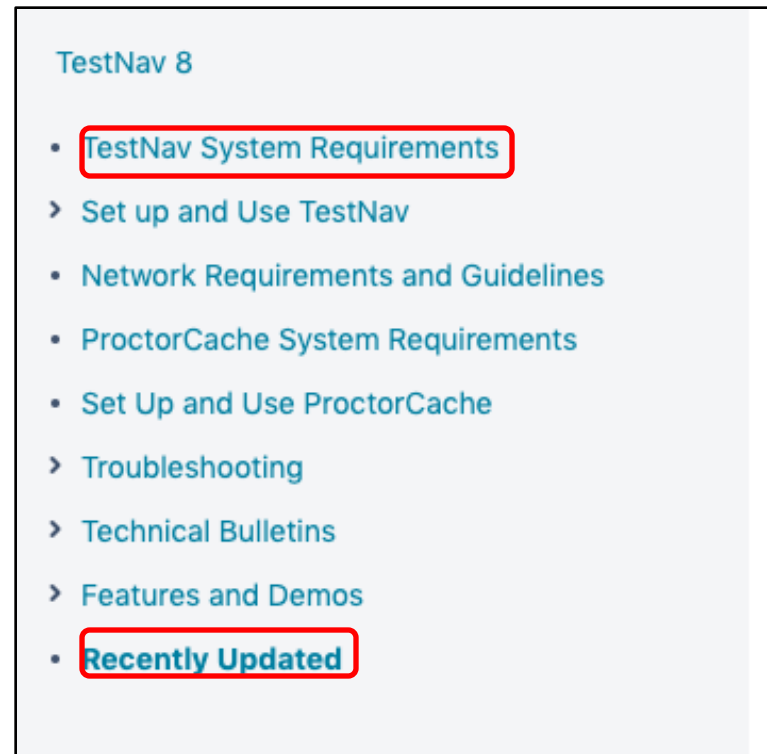
Support

Multiple Support Options

- Technology office hours

- Pearson help desk

Technology Office Hours

Pearson Field Engineer staff are available to discuss technology questions/concerns specific to your district and/or school at a time convenient to you.

The calendar is available at [Illinois Pearson Support](#) or [IL Field Services Engineering](#) to set-up a personal appointment to discuss any of the following:

- How your district infrastructure interacts with Pearson systems (examples may include: firewalls, content filters, student devices, ProctorCache servers, Wi-Fi access points, etc.).
- How to prepare and complete an infrastructure trial in your district.
- Discuss issues or questions that arose while performing an infrastructure trial.
- How to set-up caching in your district.
- Other recommendations for online testing set-up for your district or school.

Schedule your Technology Office Hours!

ISBE - Pearson Contacts Information

ISBE Assessment & Accountability

866-317-6034

assessment@isbe.net

www.isbe.net/Pages/Assessment.aspx

https://www.isbe.net/Pages/testinvestinkidsact.aspx

Pearson Customer Support

833-213-3879

https://il.mypearsonsupport.com

ALWAYS LEARNING