TestNav 8 User Guide

Copyright © 2014, Pearson Education, Inc.
Published January 15, 2014

TestNav 8 User Guide

- Revision History
- What is TestNav?
- Hardware and Software Requirements
- Test Your Systems
- Set Up Your Network and Testing Devices
  - Adjust Your Firewall Settings
  - Disable Unnecessary Applications and Processes
  - Adjust Your Proxy Server and Content Filter Settings
  - Disable Pop-Up Blockers
  - Set Response File Backup Locations
  - Set Up Proctor Caching
  - Set Up Java on Testing Computers
    - Install Java
    - Enable Java in Your Web Browser
    - Java Security Warnings
    - Eliminate the Java Prompt when Testing
  - Freeze Your Testing Environment
- Reference
  - TestNav Folder Name and Location
  - TestNav Log File Location
  - Application Error Messages
  - Platform Error Messages
- Technical Support - TestNav 8

Revision History

Date	Revisions
1/15/2014	Removed the following sections: • Email Settings • Wireless Network

What is TestNav?

TestNav 8 is Pearson's newest test delivery platform for online testing. It runs in the Cloud, delivering tests via a web browser on desktop and laptop computers and a custom app on selected tablets. It can deliver a wide range of item types, and is QTI and APIP compliant.

> The IMS Question & Test Interoperability (QTI) specification enables the exchange of item, test and results data between authoring tools, item banks, test constructional tools, learning systems and assessment delivery systems.
>
> The Accessible Portable Item Protocol (APIP) Standard provides assessment programs and question item developers with a data model for standardizing the interchange file format for digital test items.

Hardware and Software Requirements

TestNav can be used with various operating systems and browsers on desktop and laptop computers as well as with a custom app on supported tablet devices.

See the http://www.pearsononlinetesting.com/TestNav/8/index.html to find the full list of requirements for your TestNav release version.

Test Your Systems

Check all your devices against stated requirements. Perform this task before you move on to any other tasks.

See the System Check User Guide for TestNav 8 for information about testing:

- Your network to estimate testing capacity and to determine the optimal number of proctor caching computers
- Every computer in a testing lab to verify they have supported operating systems, browsers, and Java versions installed

Manually check that iPads and Chromebooks you will use for testing meet stated requirements.

See the http://www.pearsononlinetesting.com/TestNav/8/index.html to find the full list of requirements for your TestNav release version.

Set Up Your Network and Testing Devices

Complete the tasks in this section.

Adjust Your Firewall Settings

If you are running a firewall on your network or on your individual testing devices, open the required URLs and ports.

See the http://www.pearsononlinetesting.com/TestNav/8/index.html to find the full list of requirements for your TestNav release version.

Disable Unnecessary Applications and Processes

To ensure maximum reliability, performance, and security during testing, we strongly recommend that only those applications and processes needed for online testing be running on test delivery workstations before TestNav is launched.

The TestNav delivery engine does not permit access to other desktop applications (including applications that may be launched automatically) without terminating the test. Configure common applications like these to NOT launch during testing sessions:

- Anti-virus software performing automatic updates
- Power management software on laptops warning of low battery levels
- Screen savers
- E-mail with auto message notification
- Calendar applications with notifications, such as Google Calendar
- Pop-up blockers

Adjust Your Proxy Server and Content Filter Settings

If you are running a proxy server or content filter on your network or on your individual testing devices, open the required URLs and ports.

See the http://www.pearsononlinetesting.com/TestNav/8/index.html to find the full list of requirements for your TestNav release version.

Disable Pop-Up Blockers

If you are testing on desktop or laptop computers via a web browser, disable any pop-up blockers that may be running.

Set Response File Backup Locations

The TestNav Early Warning System (EWS) saves the student's responses to an encrypted backup file so the student can either continue testing or exit the system without losing data. This activity occurs in the background of the test delivery software while the software continues to provide test questions to the student.

For Windows and Mac OSX, the default location for this file is the Pearson folder in the user's home directory and may be configured on TestNav releases 8.0.4 and greater.

This is configured differently depending on the system used to configure TestNav. See the Configuring TestNav and Proctor Caching document for your program.

On supported mobile devices, the default location varies by operating system and is not customizable.

Set Up Proctor Caching

When configured and used, the proctor caching computer downloads and stores test data, such as multimedia or test questions, and then serves that data to individual test computers from within the local network. This enables faster test page loading times and more efficient test taking.

Proctor caching is not always required. Ask your program coordinator if you are unsure whether you should set this up.

This is configured differently depending on the system used to configure TestNav. See the Configuring TestNav and Proctor Caching document for your program.

Set Up Java on Testing Computers

TestNav 8 opens a Java applet in order to run full screen, which is required to prevent test takers from accessing other programs while testing on desktop and laptop computers.

> If you are testing on an approved tablet using the TestNav app, this does not apply.

To install Java and get it set up to work smoothly in your browser for testing, follow these steps:

Install Java

Go to the Java website at https://www.java.com/ and follow the instructions there to download and install Java on your computer.

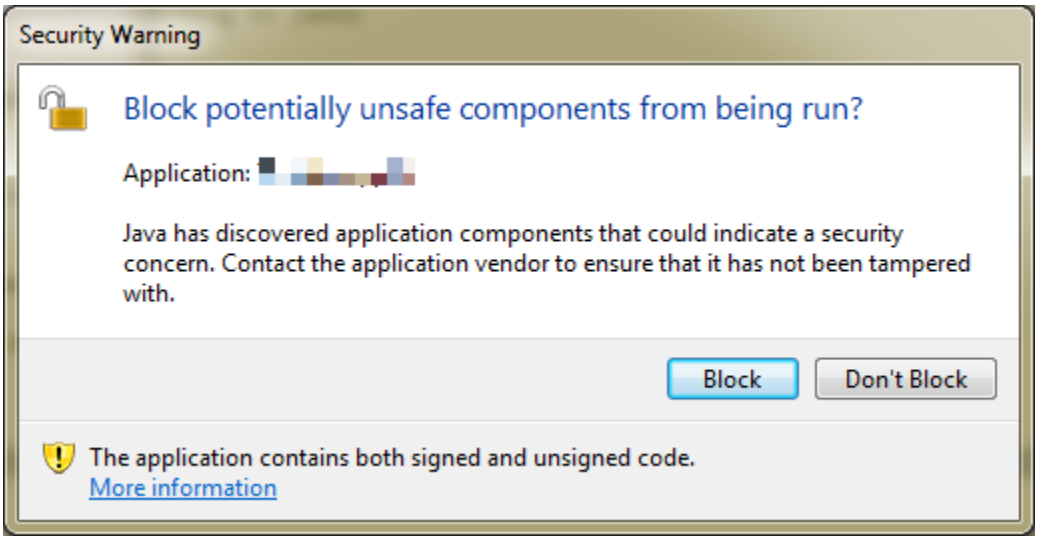
If Java is already installed, check to make sure it is the most current release. If not, update Java.

Enable Java in Your Web Browser

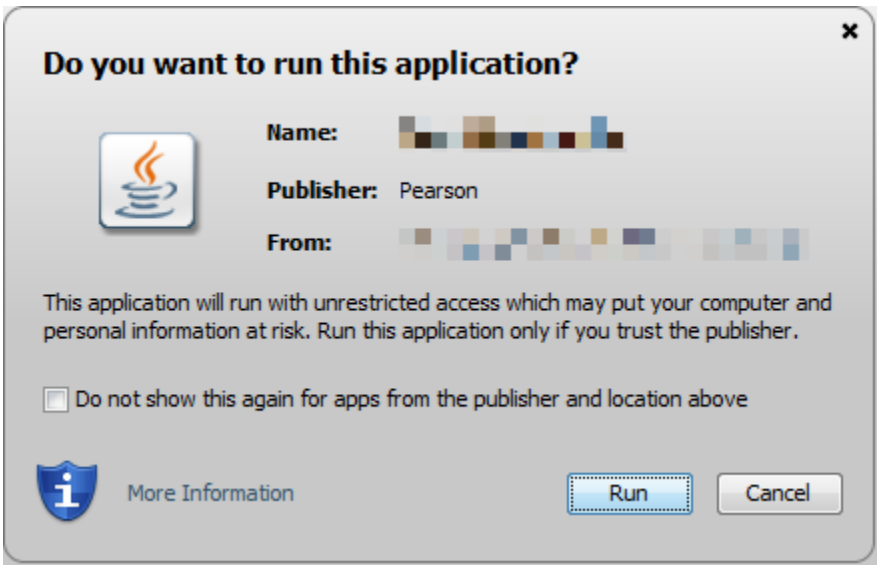
Follow the instructions on the Java website at https://www.java.com/en/download/help/enable_browser.xml to enable Java in your web browser.

Java Security Warnings

You may receive a security warning like this one, when you run TestNav. If you do, select **Don't Block**. The content is safe.



You will receive a warning like this one. When you do, select **Run**, otherwise TestNav will not open.

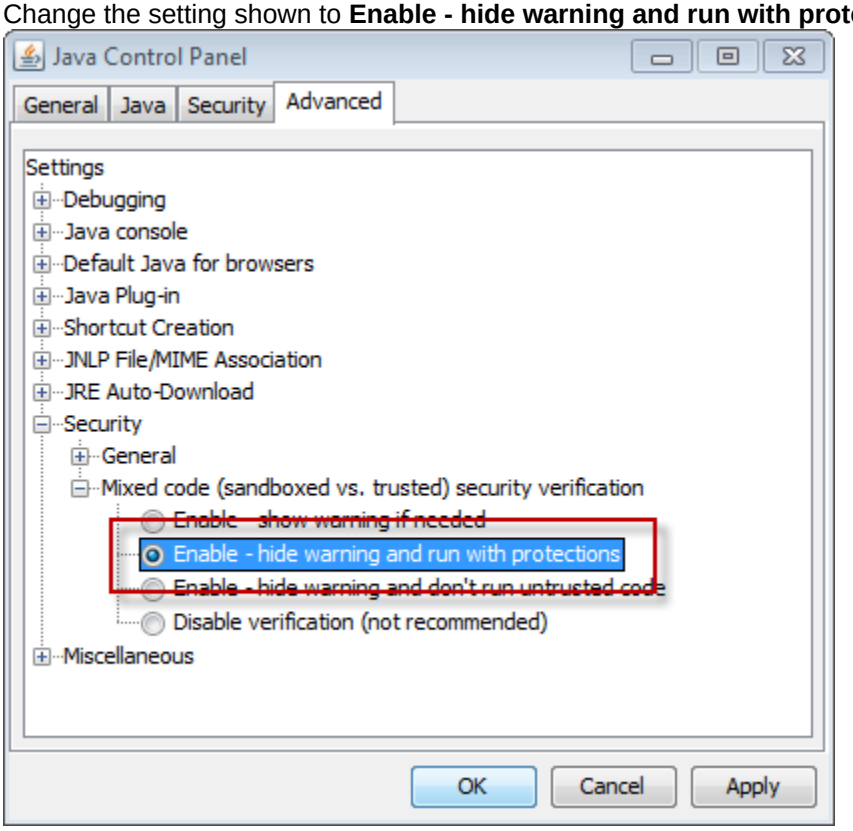


Eliminate the Java Prompt when Testing

By default, Java will ask permission to run TestNav 8 every time it is started. To stop this behavior and instead

launch tests immediately, change a setting in the Java Control Panel.

1. Find the Java Control Panel and open it.
    - In **Windows**, look for **Java** in the Control Panel.
    - In **Mac OSX**, look for **Java** in System Preferences.
2. Select the **Advanced** tab.
3. Change the setting shown to **Enable - hide warning and run with protections**.



Freeze Your Testing Environment

For maximum reliability, performance, and security during testing Pearson recommends that you make no changes to your testing systems during scheduled testing windows, once you have certified that TestNav works in your environment.

For the best results, this means that you should not make hardware changes or third-party software updates or auto-updates during an online testing administration.

Sometimes these are unavoidable, such as when a Java update from Oracle is required before anything that requires Java will run. If this happens and you have problems, call support for assistance.

Reference

This is information that is vital to some, but which may not be of interest to or needed by all.

TestNav Folder Name and Location

TestNav creates a Pearson directory in the home directory of the testing computer. This is the location:

- Windows XP:
  `C:\Documents and Settings\username\Pearson\...`

- Windows Vista and Windows 7:
  `C:\Users\username\Pearson\...`
- Mac OSX:
  `//Users/username/Pearson/...`

> We recommend that the Pearson directory be excluded if desktop restoration tools such as DeepFreeze are used.

TestNav Log File Location

The TestNav client creates a directory called “logs” in the Pearson folder in the user’s home directory. The TestNav client logs the current system output and error messages for diagnostic purposes. This information is helpful to our technical support team, should you need to contact them for assistance.

Application Error Messages

For application errors we are going to use the following error number ranges:

- 2000-2999 - Used for Warning messages
- 3000-3999 - Used for Fatal error messages

Message	Description
2000	Not used
2001	You have less than 5 minutes left.
2002	Not used
2003	errorType + ": require failed to load a file. (" + [name of the missing file] + ")"
2004	Your time has run out for this section. You will not be able to return here.
2005- 2008	Not used
2009	Time for this test has expired. Your test will be submitted.
2010	A tool has failed to load. Please try again.

Message	Description	Additional information
3000	We have detected an error in your test. Please have your administer contact customer support before continuing at 1-888-802-7502.	This message is displayed when the response StateObject is wrong before converting to JSON.
3001	Required module has failed to load.	This happens because a needed Java script module hasn't loaded. Check for network connection issues.
3002	Item Controller has failed to load.	This happens because a needed Java script module hasn't loaded. Check for network connection issues.

3003	This device needs to have iOS version 6 or higher installed in order to take the test.	
3004	Unable to communicate with the testing server. Please contact your administrator.	This happens because a needed Java script module hasn't loaded. Check for network connection issues.
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.	This happens when the student's session has been invalidated. This can be caused by the same login being used on two computers or two simultaneous sessions. There are also cases where this may happen because the login session has expired or the student's test has already been submitted.
3006	TestNav has detected that Guided Access has been turned off. TestNav has been shut down. You may need assistance from your test monitor to restart the test.	This happens when an IPad running the TN8 app has had the IOS Guided Access Feature turned off. The test proctor will have to restart the test in order to continue.
3007	Unable to communicate with the testing server. Please contact your administrator.	This is most likely to happen due to network interruptions or in the case of an invalidated session. Please trouble shoot network connectivity and have student attempt to login again.
3008	Unable to communicate with the testing server. Please contact your administrator.	This is most likely to happen due to network interruptions or in the case of an invalidated session. Please trouble shoot network connectivity and have student attempt to login again.
3009	Unable to communicate with the testing server. Please contact your administrator.	Send log to Level 2 support.
3010	Unable to communicate with the testing server. Please contact your administrator.	This is most likely to happen due to network interruptions or in the case of an invalidated session. Please trouble shoot network connectivity and have student attempt to login again.
3011	There has been a problem loading this item. Please contact your administrator.	This happens because a needed Java script module hasn't loaded. Check for network connection issue.
3012	You cannot take this test with your browser. In order to take this test, you must use the TestNav 8 App.	
3013	Unable to communicate with the testing server. Please contact your administrator.	This happens because of network interruptions. Please trouble shoot network connectivity and send logs to Level 2 support.
3014	You cannot take this test on your browser. In order to take this test you must install the app.	
3015	Unable to communicate with the testing server. Please contact your administrator.	This happens because of network interruptions. Please trouble shoot network connectivity and send logs to Level 2.
3016	Your login information is no longer valid. This may have occurred if you are returning to a test in the same session, or if your login has been used to access this test from another computer. Your test assignment must be resumed before you can log back in.	A student is logged on to the test on a different computer, and cannot log back in until logged out of current session.

3017	You cannot take this test with your browser. In order to take this test, you must use the TestNav 8 App.	
3018	Your last item was not saved. Please inform your test proctor that the test must close due to a connectivity error.	Send log to Level 2 support.
3019	Incorrect seal code. Please try again.	
3020	Not used at this time.	
3021	Unable to start Secure Browser. This can be resolved by exiting the browser and starting again. Please contact your proctor/teacher for help.	This can occur the first time a student logs into a secure test. Close all browser windows and relaunching the application.
3022	This computer needs to have Internet Explorer 9 or higher installed in order to take this test.	Install IE 9 or higher in order to use the computer to take the test.
3023	Your test must close immediately. Please see the test proctor for more information.	Send log to Level 2 support.
3024	Unknown error trapped and logged. Please inform your test proctor.	Send log to Level 2 support.
3025	Java has not been installed on this machine and is required. Please install Java and then refresh this browser page to log in	Java will have to be installed in order to run the application.
3026	The test cannot be taken on this device. Please contact your test proctor for additional assistance.	This device doesn't support TN8, and can't be used to take the test.
3027	Unable to communicate with the testing server. Please contact your administrator.	This happens because a needed module hasn't loaded. Check for network connection issues.
3028	Form and Form ID do not match. Please inform your test proctor.	
3029	Test window has exited fullscreen mode. Test aborted. Please ask your proctor for assistance	
3030	Pop-ups are currently blocked for this site. Please enable pop-ups for TestNav to function correctly and refresh your browser.	
3031	There was an error launching the Java applet. Please ask your proctor for assistance	
3032	Please refresh your browser after enabling pop-ups.	
3033	Your test must close immediately. Please contact your administrator.	
3034	In order to take the test using the Chrome browser, this computer must have Chrome 20 or higher installed.	

3035	TestNav does not support Safari on Windows. Please use Firefox 14+, Chrome 20+, or Internet Explorer 10+. If you are using Windows XP, IE is not supported but you may use Firefox and Chrome.	
3036	TestNav does not support Internet Explorer on Windows XP. Please use Firefox 14+ or Chrome 20+.	
3037	TestNav does not support Internet Explorer 10 on Windows Vista. Please use Firefox 14+ or Chrome 20+.	
3038	TestNav does not support Internet Explorer 9 on Windows 8. Please use Firefox 14+, Chrome 20+, or Internet Explorer 10+	
3039	In order to take the test with Firefox, this computer must have Firefox 14 or higher installed.	
3040	In order to take the test with Safari, this computer must have Safari 5 or higher installed.	
3041	This device size is not supported.	
3042	You cannot take the test with this operating system.	
3043	You must be in Kiosk mode in order to take this test.	
3044	You must be in Single App mode in order to take this test.	
3045	This computer needs to have OSX 10.5 or higher installed in order to take this test.	

Platform Error Messages

Engine errors are broken into the following ranges:

- 5000-5999 Authentication
- 6000-6999 State
- 7000-7999 Navigation
- 8000-8999 Server
- 9000-9999 API

Message	Description	Additional Information

5021	Unable to communicate with the testing server. Please contact your administrator.	Connection not found or connection lost during authentication.
5022	Unable to communicate with the testing server. Please contact your administrator.	URL requested was not found (404) or internal server error (500) during authentication.
5023	Unable to communicate with the testing server. Please contact your administrator.	Parser error (bad data was sent from the application to the engine or from the engine to the server) during authentication.
5024	Unable to communicate with the testing server. Please contact your administrator.	Transmission timed out during authentication.
5025	There has been a problem loading this item. Please contact your administrator.	Transmission aborted during authentication.
5026	Invalid login token. Please try again.	Autologin using an authentication token has failed because the token has expired or is otherwise invalid/not recognized. The authentication token is requested from TestNav by the customer site and must be used within five minutes to allow the examinee to access the test.
5027	TestNav is unable to write to the local drive due to browser security settings. Testing can not continue.	TestNav can't function because it is unable to write necessary files to the local system. This is because the operating system is keeping the browser in a sort of quarantine (sandbox). Some operating systems do this to applications that can be used to cause system instability or other harm.

Message	Description	Additional Information
6000	Wrong response was being saved to this item. The test will be closed. Contact your administrator.	
6001	Wrong response was being saved to this item. The test will be closed. Contact your administrator.	
6021	Unable to communicate with the testing server. Please contact your administrator.	Connection not found or connection lost when saving or retrieving state.
6022	Unable to communicate with the testing server. Please contact your administrator.	URL requested was not found (404) or internal server error (500) when saving or retrieving state.
6023	Unable to communicate with the testing server. Please contact your administrator.	Parser error (bad data was sent from the application to the engine or from the engine to the server) when saving or retrieving state.
6024	Unable to communicate with the testing server. Please contact your administrator.	Transmission timed out when saving or retrieving state.

6025	There has been a problem loading this item. Please contact your administrator.	Transmission aborted when saving or retrieving state.

Message	Description	Additional Information
7021	Unable to communicate with the testing server. Please contact your administrator.	Connection not found or connection lost during navigation.
7022	Unable to communicate with the testing server. Please contact your administrator.	URL requested was not found (404) or internal server error (500) during navigation.
7023	Unable to communicate with the testing server. Please contact your administrator.	Parser error (bad data was sent from the application to the engine or from the engine to the server) during navigation.
7024	Unable to communicate with the testing server. Please contact your administrator.	Transmission timed out during navigation.
7025	There has been a problem loading this item. Please contact your administrator.	Transmission aborted during navigation.

Message	Description	Additional Information
8021	Unable to communicate with the testing server. Please contact your administrator.	Connection not found or connection lost.
8022	Unable to communicate with the testing server. Please contact your administrator.	URL requested was not found (404) or internal server error (500).
8023	Unable to communicate with the testing server. Please contact your administrator.	Parser error (bad data was sent from the application to the engine or from the engine to the server).
8024	Unable to communicate with the testing server. Please contact your administrator.	Transmission timed out.
8025	There has been a problem loading this item. Please contact your administrator.	Transmission aborted.
8026	Unable to connect to the proctor caching computer. Please contact your administrator.	
8027	The testing server can not be reached. Please verify your internet connection and then choose Retry, or close the app and try again later.	This is displayed when a TestNav app is launched and no network connection is detected.
8028	The java applet is unable to load. This can occur when Oracle disables an existing version of Java because a new version has been released that contains critical fixes. Please upgrade to the latest version of Java.	

8029	The installed app is out of date and needs to be updated in order to use TestNav on this device.	

Message	Description	Additional Information
9020	The username or password you entered is incorrect.	Unable to complete Sign In with this Email and Password.
9021	Your login information is not recognized. Please try again.	AuthenticateUser general error
9022	Unable to refresh available tests.	Session is not active.
9023	Unable to refresh available tests.	refreshAvailableTests general error
9024	The username or password you entered is incorrect.	
9025	This test has been completed and may not be taken again.	
9026	This test must be resumed by the proctor to allow it to be taken again.	
9027	Unable to start test. Please close this window and try again.	The testing window for this test is not currently active.
9028	Your login information is not recognized. Please try again.	Authenticate general error
9029	Your login information is not recognized. Please try again.	Login not found.
9030	Your login information is no longer valid. This may have occurred if you are returning to a test in the same session, or if your login has been used to access this test from another computer. Your test assignment must be resumed before you can log back in. Please contact the proctor.	Session mismatch.
9031	There has been a problem loading this item. Please contact your administrator.	Unable to retrieve Item
9032	Unable to login with this userid.	
9033	Unable to communicate with the testing server. Please contact your administrator.	getTestStateInternal general error
9034	Your login information is not recognized. Please try again.	
9035	There has been a problem loading this item. Please contact your administrator.	The item requested does not exist for this test.
9036	The username or password you entered is incorrect.	
9037	There has been a problem loading this item. Please contact your administrator.	The item requested does not exist for this test.
9038	The username or password you entered is incorrect.	
9039	There has been a problem loading this item. Please contact your administrator.	
9040	The username or password you entered is incorrect.	
9041	There has been a problem loading this item. Please contact your administrator.	The item requested does not exist for this test.

9042	There has been a problem loading this item. Please contact your administrator.	Item does not exist.
9043	There has been a problem loading this item. Please contact your administrator.	Item does not exist.
9044	There has been a problem loading this item. Please contact your administrator.	Item does not exist.
9045	There has been a problem loading this item. Please contact your administrator.	Item does not exist.
9046	Your test items have been saved, but the test can't be marked as complete due to a connectivity error. Please inform your test proctor that the test must close.	Test could not be exited.
9047	Your test items have been saved, but the test can't be marked as complete due to a connectivity error. Please inform your test proctor that the test must close.	Test could not be exited.
9048	There has been a problem loading this item. Please contact your administrator.	Unable to retrieve Item
9049	There has been a problem loading this item. Please contact your administrator.	Unable to retrieve Item
9050	There has been a problem loading this item. Please contact your administrator.	Unable to retrieve TestDef.
9051	There has been a problem loading this item. Please contact your administrator.	Unable to retrieve TestDef.
9052	There has been a problem loading this item. Please contact your administrator.	renderErrorJSONString general error
9053	Your login information is no longer valid. This may have occurred if you are returning to a test in the same session, or if your login has been used to access this test from another computer. Your test assignment must be resumed before you can log back in. Please contact the proctor.	Session mismatch.
9054	Your login information is no longer valid. This may have occurred if you are returning to a test in the same session, or if your login has been used to access this test from another computer. Your test assignment must be resumed before you can log back in. Please contact the proctor.	Session mismatch.
9055	Your test must close immediately. Please see the test proctor for more information.	Test status not valid for continuing test
9056	Your test must close immediately. Please see the test proctor for more information.	Testing cannot continue as secure data is being requested via an insecure call.
9057	Your test must close immediately. Please see the test proctor for more information.	Testing cannot continue as insecure data is being requested via a secure call.
9058	The username or password you entered is incorrect.	Unable to complete Sign In with this login and test code.
9059	The username or password you entered is incorrect.	Unable to complete Sign In with this login and test code.

9060	Your login information is not recognized. Please try again.	Login not found.

Technical Support - TestNav 8

For technical support, please use the contact information given to you by your program.