Online Testing Infrastructure Readiness Checklist 2017–2018

Online Testing Checklist Overview

Technology Staff

The *Online Testing Infrastructure Readiness Checklist* will help you create a successful testing experience for schools and students. This checklist can be used before the 2017–2018 MCA administration. Tasks are listed chronologically. To limit test day technical issues, technology staff should perform the tasks below according to the recommended timelines. As district infrastructure changes, relevant tasks that had been completed before testing should be reassessed to ensure that the change did not impact completed readiness efforts.

TestNav 8 is accessed in one of two ways. Steps listed in this checklist may vary depending on the option used to access TestNav 8.

- **Installable TestNav (strongly recommended).** Available as a mobile app for tablets and Chromebooks, and as TestNav Desktop, an application for desktop and laptop computers. Installable TestNav is downloaded, installed, set up, and verified by technology staff.
- **Browser-based TestNav** (must use Firefox ESR 52 (32 bit))**.** Does not require TestNav to be on each test-delivery computer or workstation; instead, a URL (http://mn.testnav.com) is used by students to sign in to the online test or item samplers.

Resources referenced in this checklist are available on PearsonAccess Next website:

- The TestNav 8 Online Support page includes system requirements, detailed, setup instructions for each supported devices, infrastructure and network preparation, troubleshooting guidance, App Check and ProctorCache information, and complete error code documentation (PearsonAccess Next > TestNav 8 Online Support (under Quick Links)).
- The User Guides page includes Minnesota-specific system user guides and quick guides (PearsonAccess Next > Resources & Training > User Guides).

Refer to the TestNav 8 Online Support page often for hardware and software requirements updates and technical bulletins, especially the Recently Updated page to quickly view new updates. Review the *Assessment Update* released by the Minnesota Department of Education (MDE) every Wednesday, which includes a Tech Update section for relevant technology information, troubleshooting guidance, and implementation resources.

Test Security Reminders

- Annually complete the *Test Security Training* and *Assurance of Test Security and Non-Disclosure*, as well as any other trainings required by your district. Note that the *Assurance of Test Security and Non-Disclosure* is embedded in the *Test Security Training*.
- Do not use actual student tests to prepare for test administration. Instead, follow the steps in this checklist to ensure your sites are ready for testing.
- Follow your district's policies and procedures for providing technology assistance during testing. If you need to report a technical issue within your district or to Pearson, write down any error messages or numbers along with the student information. Do not take a picture of the error message or include any information on the content of the item when you report technical issues.
- Although there may be situations where you have access to test content, such as during a technical issue, you must not copy, share, or reference test content in any way.
- Report any test security breaches immediately to your District or School Assessment Coordinator.

District Assessment Coordinators (DACs)

District Assessment Coordinators (DACs) will be the primary recipients of memos that provide information about online testing. It is important for DACs and technology staff to develop a communication plan for sharing this information and for determining how communication with the Pearson help desk will be handled at the district. The Pearson help desk can be reached at 888-817-8659 or submit a Pearson help desk request.

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	Complete Technology Setup **Required** **2 Months Prior to Testing**
1	DACs must set up any new user accounts for the Technology Staff user role. After logging in, from the Home page of PearsonAccess Next, under **Setup**, select **Users**. Users must be created in both PearsonAccess Next and the Training Center if they need to have access to both sites. The Training Center is only intended to be used for technology preparation. No action is required for technology staff who already have PearsonAccess Next accounts. Any users who no longer need an account or who are no longer at the district should be deleted. Review the _PearsonAccess Next User Accounts Guide_ for additional information.
2	Identify testing labs/administrator devices and review the PearsonAccess Next System Requirements in order to ensure optimal performance to prepare for and administer assessments in PearsonAccess Next.
3	Review the TestNav System Requirements page and ProctorCache System Requirements page for system and proctor caching requirements for computers and devices. • Verify that student testing devices and designated ProctorCache machines comply with hardware/software requirements. • Update student testing devices to meet browser dependencies (for browser-based TestNav only).
4	Review the Set Up and Use TestNav page. Check devices and take an inventory of software applications, including cameras (still and video), screen capture programs (live and recorded, e.g., Skype), email, instant messaging, application switching, media players (e.g., iTunes), printing capabilities, or any other application that will launch automatically and terminate testing. These software applications need to be closed or disabled on all student testing devices on the days students are to test. Configure the common applications listed below NOT to launch on any student testing devices during testing sessions: • Anti-virus software performing automatic updates • Verify autofill is not accessible • Power management software on laptops warning of low battery levels • Screen savers and sleep mode • Email with auto message notification • Calendar applications with notifications (e.g., Google Calendar) • Pop-up blockers • Set automatic updates (e.g., iTunes)

5	For installable TestNav, only: Install the TestNav 8 app and follow the specific setup steps for each type of device that you will use. Detailed setup steps for all supported devices and configurations can be found on the Set up and Use TestNav page. If the TestNav 8 application was previously installed on the test device, you may need to take steps to update before following device specific setup instructions. • Android, Chrome, and Windows Store apps will update automatically to the latest version if automatic updating is enabled on the device, and no further action is required. For iOS and desktop versions, you will uninstall the TestNav 8 application using your devices uninstall process, and download and install the updated version of the TestNav 8 application for your device. For browser-based TestNav (Firefox ESR 52 (32 bit)), only: Ensure Java is installed, activated, permitted to run in the Firefox browser, and that the version meets the minimum supported requirements on all student workstations that will be used for online testing.
6	Configure all infrastructure services, network devices, and applications that may reject, redirect, reroute, delay or modify network traffic packets between the student test device, ProctorCache machine, and Pearson servers. This includes but is not limited to: firewall/content filters, IPS/IDS, network and device security, address translation services, packet inspection, load balancing, and global caching services. At a minimum, your testing configuration should whitelist all traffic from the following list of URLs and allow browser popups for Pearson sites, including PearsonAccess Next. • *.testnav.com:80 • *.testnav.com:443 • *.pearsontestcontent.com • *.thawte.com • *.usertrust.com • *.comodoca.com • TCP ports 4480 and 4481 (for communication between TestNav 8 and the ProctorCache machine) • Google-analytics.com (optional) • Set browsers to allow pop-ups • Allow read and write access to Saved Response File (SRF) locations

7	Download and install ProctorCache.
	Set Up and Use ProctorCache.
	ProctorCache is a software program that enables districts to download encrypted test content to a local computer. A district downloads the content once for each test administration. This reduces the amount of bandwidth required for electronic testing.
	If using ProctorCache, the ProctorCache software must be downloaded and installed and the ProctorCache machine must be configured for TestNav 8 prior to creating a test session.
	Ensure that you have the latest version of the ProctorCache application and that old content has been purged. The latest version number is provided on the ProctorCache System Requirements page.
	- To update ProctorCache to the latest version, you should first purge all test content from prior test administrations using your current installation of ProctorCache. Content downloaded from the previous test year is no longer accessible to district staff and students and should be purged. - Next, uninstall the previous version of ProctorCache using the software removal process for your operating system. - Finally, reboot the computer and install the new version. If you are not a network administrator, ProctorCache requires full local administrator permissions and a working knowledge of your network.
8	Configure TestNav for Proctor Caching. Enter TestNav 8 configurations in the Training Center before you create any test sessions. Later, while you are creating your test sessions, you will select the named configuration that you create here to be used for each test session. - Sign in to the Training Center (PearsonAccess Next > Technology > PearsonAccess Next Training Center > Sign In to the Training Center). - From **Setup** > **TestNav Configurations**, select the dropdown menu to the right of the **Start** button and select **Create / Edit TestNav Configurations**. - Enter the details of any proctor caching computers that you will use to precache tests. - Select **Create**. Import or Export TestNav Configurations. TestNav 8 configurations created in the Training Center can be imported to PearsonAccess Next.

9	Run App Check, as applicable, on every testing device in your testing environment.
	For installable TestNav, only:
	> On the Set up and Use TestNav page under Installable TestNav, select the applicable device. View the Run App Check section.
	> Run App Check for TestNav 8 (TestNav 8 App > User dropdown menu > App Check). App Check verifies that the test device can contact the TestNav servers, and that the app can run in a secure kiosk mode, but it does not provide bandwidth speed tests. Running App Check with the optional Configuration Identifier will verify connectivity to the installed and configured ProctorCache machine.
	> In order to run App Check with proctor cache configurations, a Configuration Identifier must be copied from PearsonAccess Next and added to App Check. The Configuration Identifier can be found in PearsonAccess Next by going to: • Setup > TestNav Configurations • Locate and select the TestNav configuration applicable to your district/school. • Select the Create/Edit TestNav Configurations option in the Start dropdown. The Identifier is located beneath the IP address and port fields for your ProctorCache computer.
	NOTE: The SystemCheck tool is no longer available due to the increased usage of installable TestNav and the limited browser options available for testing. If you are testing using the supported browser, install the Desktop App and run App Check. If the connection test is successful then the browser will also connect successfully.
	To support the increased reliance on wireless networks, Pearson created a Network Requirements and Guidelines page, which present wireless network best practices and troubleshooting tips.
10	Configure Response File Backup Locations. It is strongly recommended that you add a secondary save location to provide an additional failsafe for preventing loss of student responses. • You have the ability to designate primary and secondary SRF locations for each type of test device. • Windows and Mac devices can take advantage of local, network, and SFTP SRF save locations. • ChromeOS and iOS devices use a local Primary SRF location. Secondary SRF locations for these device types must be SFTP.

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	Conduct an Infrastructure Trial **Recommended** **1-2 Months Prior to Testing**	
	The Infrastructure Trial is conducted using the PearsonAccess Next Training Center. An Infrastructure Trial is an opportunity for districts to prepare for online testing by simulating test-day network utilization. This will help determine if there are any infrastructure issues to resolve and confirm all testing devices are properly configured and ready to run the online assessments. Unlike a live assessment, you will not use real student information; instead, you will use sample students in the PearsonAccess Next Training Center. Sample students are created by Pearson for the purpose of conducting the Infrastructure Trial. Refer to the *Infrastructure Trial User Guide* for more detailed information about the Infrastructure Trial. Sign in to the <u>Training Center</u> (PearsonAccess Next > Technology > PearsonAccess Next Training Center > Sign In to the Training Center) to set up and complete the Infrastructure Trial.	
11	Create Infrastructure Trial test sessions in the Training Center: 1. Once you have signed in to the Training Center, verify that the Infrastructure Trial test administration is selected. To change the test administration, select the current test administration in the black bar at the top of the page, select the 2017–2018 dropdown, and then select **Infrastructure Trial**. 2. From **Testing** > **Sessions**, select the dropdown menu to the right of the **Start** button and select **Create / Edit Sessions**. 3. On the New Session screen, enter the required information as indicated by the asterisks. For Test Assigned, select High School Science MCA. The Form Group Type will default to Main. Scheduled Start Date and Time are for planning purposes only; the test session will start whenever the Start Session button is selected, regardless of the date entered here. If at least one proctor caching computer is configured, you must select a proctor caching computer. 4. Select **Create**.	Section 3.1 Create a New Test Session, in the *Infrastructure Trial User Guide*
12	Add sample students to the Infrastructure Trial test session: 1. From **Testing** > **Students in Sessions**, in the Session List, select Add a Session. In the Session Name field, begin entering the name of the test session. Select the checkbox next to the test session and select Add Selected. 2. Select the dropdown menu to the right of the **Start** button and select **Students**. 3. On the Add Student to Sessions page, under the **Session** dropdown, select the test session name. Under **Find available students**, select the dropdown next to **Search** and select **Show all results**. 4. Select students, up to 25 at a time, with the name "Student, A" (indicating accommodated text-to-speech) selecting the checkbox next to each student name or selecting the checkbox in the top left corner, next to the **Student** column header, to select all the students displaying on the page. If selecting the checkbox in the top left corner, verify that all students selected have the name "Student, A." 5. Select **Add**. Repeat steps to add additional students as needed. The number of sample students added to the test session should be based on the maximum number of testing devices that will be used concurrently during testing.	Section 3.2 Add Sample Students to a Test Session, in the *Infrastructure Trial User Guide*

13	If using ProctorCache, ensure proctor caching software was properly installed and the ProctorCache service is running by visiting the ProctorCache Admin page. This page is a web interface to your ProctorCache machine that is hosted by the ProctorCache service while it is running. If the Admin page does not load that indicates that there was an issue when the software was installed, the service is not running, or that ports 4480 and/or 4481 are being blocked. To access the ProctorCache Diagnostics page, use shortcuts which are automatically created in the following locations: • For Macs, go to the ProctorCache folder located under Applications. • For PCs, go to the ProctorCache folder located on the C:/ drive.	
14	If using ProctorCache, precache test content. Precaching by test is recommended because it downloads all forms and content for the selected test. 1. From **Setup** > **Precache By Test**, select the box next to High School Science MCA. 2. Select one precache server from the list. 3. Select **Precache**. 4. Verify that content has successfully cached by visiting the ProctorCache diagnostics page and verifying that all cached content has green OK status indicators.	Section 4.0 Precache Test Content, in the *Infrastructure Trial User Guide*
15	Print Infrastructure Trial student testing tickets for sample students in the Training Center. 1. From **Testing** > **Students in Sessions**, add the test session to the Session List. 2. Select **Testing Tickets and Session Resources**. Under **Student Testing Tickets**, select **Print all for this session**. When the tickets open, they will be formatted as one per page. To change how the tickets are printed, select a print option from the dropdown menu. 3. Use your browser's print function to print the testing tickets.	Section 5.1 Print Infrastructure Trial Student Testing Tickets, in the *Infrastructure Trial User Guide*
16	Prepare and start the Infrastructure Trial test sessions in the Training Center. 1. From **Testing** > **Students in Sessions**, add the test session to the Session List. 2. Select **Prepare Session**. Once the test session has been prepared, Prepare Session will change to Start Session. 3. Select **Start Session**. Once the test session has been started, Start Session will change to Stop Session and a lock/unlock slider will be displayed. Student tests are automatically unlocked when the test session is started.	Section 5.2 Prepare and Start the Test Session, in the *Infrastructure Trial User Guide*
17	Using the Infrastructure Trial student testing tickets, sign in to the online High School Science MCA item sampler on each of the machines that will be used for the Infrastructure Trial. • For installable TestNav, select the TestNav 8 icon on the Home screen (for tablets); select TestNav from the Apps menu (for Chromebooks); or select the TestNav 8 icon on the desktop screen (for desktops and laptops). • For browser-based TestNav (Firefox ESR 45 (32 bit)), launch TestNav 8 by entering http://mn.testnav.com into the browser. To ensure schools have sufficient bandwidth, technology staff will need to launch an online item sampler on all student testing machines participating in the Infrastructure Trial. Users do not have to navigate through the entire item sampler to complete the simulation of the network load. Simultaneously loading these tests will simulate the network load experience of live testing.	Section 5.4 Conduct Infrastructure Trial, in the *Infrastructure Trial User Guide*

18	Monitor network performance for slowdowns or ISP bandwidth usage. If using a wireless connection, monitor the connections and verify access point placement is sufficient for testing. NOTE: If your district uses a mirroring software, remember to turn off/disable it before online testing.
19	If needed, contact the Pearson help desk at 888-817-8659 or submit a Pearson help desk request with feedback and/or concerns regarding software or hardware issues that occurred during the Infrastructure Trial. Communicate the results of the infrastructure trial to the DAC in order to keep the DAC in the loop on technology readiness.

Final Preparation for Live Testing **Required** **2 Weeks Prior to Testing**		

20	Once the DAC confirms that test sessions are set up in PearsonAccess Next for the actual MCA administration, precache by test (if using ProctorCache). Precaching by test is recommended because it downloads all forms and content for the selected test.
	
	    1. From **Setup** > **Precache By Test**, mark the boxes to select one or more tests from the list.
	    2. Select one precache server from the list.
	    3. Select **Precache**.
	
	NOTE: Precaching by test may be completed before or after test sessions are created. Test content may be cached starting two weeks before testing.	

21	Run App Check on all computers and devices that will be used for online testing to verify that no changes have been made to infrastructure.	Section *Run App Check* on each device setup page under Installable TestNav

Administer the Live Online Test	
22	Monitor network performance for slowdowns and ISP bandwidth usage.
23	Find SRF and Log Files. Retrieve SRFs as needed.