NEW JERSEY
DIGITAL LEARNING AND ASSESSMENT PORTAL

Quick Start Guide

NJTRAX
NEW JERSEY TECHNOLOGY READINESS TOOL

NJTRAX Contractor: METIRI Group

Quick Start Guide: Updating NJTRAx

Overview of NJTRAx

The New Jersey Department of Education (NJDOE) established NJTRAx to gauge the technology readiness of New Jersey schools and districts for online testing. The NJTRAx database is designed to collect and store the datasets that inform readiness ratings. Those ratings are published in reports that are customized for each school, district, region, and for the state. These reports are batch produced after a data collection effort and authorized users on those accounts are notified as to where the reports can be accessed.

As an initial step in gauging the technology readiness of NJ schools for online assessments, the NJDOE asked all districts to complete two surveys, the NJ Broadband Survey and the PARCC Technology Readiness Tool (PARCC/TRT). NJTRAx has been pre-populated with data from these sources. Your assistance is requested to review and confirm the pre-populated information and to add additional information where needed. Empty fields represent new data that NJTRAx requests (or requires) to support a more sophisticated report and future uses of the data.

Updating Data with the *Quick Start Guide*

This *Quick Start Guide* will guide you in ensuring your data is current and accurate for your districts and schools. The most efficient way to get started is to:

1. Complete the tasks listed in the ***Preparation for Editing NJTRAx Checklist***. Completing these tasks in advance will allow you to more efficiently review and update your data. Resources for completing these tasks can be found in the Appendices.

2. Follow the ***Steps for Updating Your District, School, Room, and Device Data***. Begin your review of data in the following order: **District > Schools > Rooms > Devices**. It is important to follow this order because of the way devices are connected to rooms and rooms are connected to schools.

A few ***notes*** before you get started:

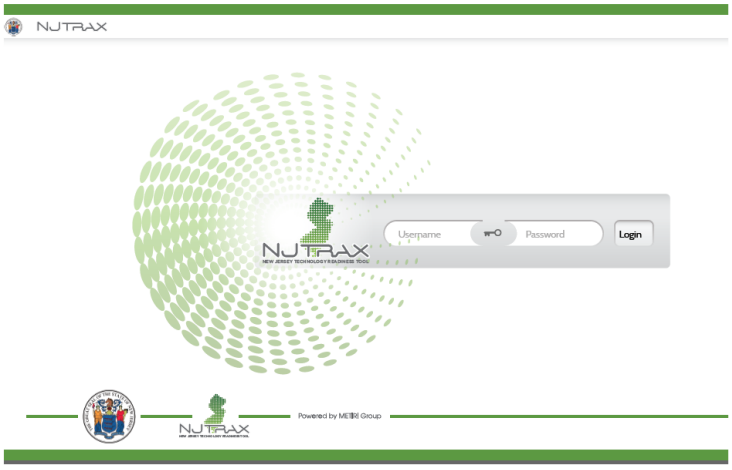
1. Throughout the NTRAx site, you will see opportunities to view in ReadOnly format, a short summary of your district, school, room and device data along with ratings. See **Appendix G** for an explanation of ratings.
2. If any required data elements are missing from the district record, NJTRAx will provide you with an alert.
3. While this *Quick Start Guide* shows you a way to navigate through the NJTRAx tool, there are multiple ways to navigate through the site.
4. To update school enrollment, add a grade and then add the enrollment data.

Preparation Checklist for Editing NJTRAx Data

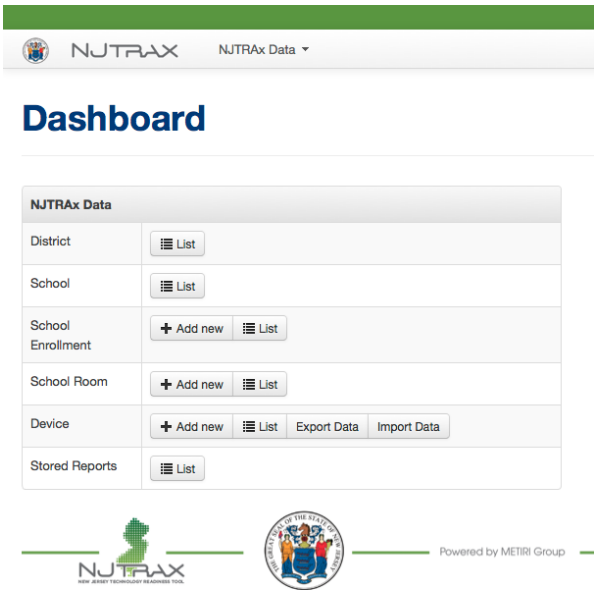
√	TASK
☐	Review the basic networking terminology (see **Appendix A**). For example, understanding that a kilobit per second (Kbps) is 1/1000 of a megabit (Mbps) can help you make sense of fields and data in reports.
☐	Determine your reported internet bandwidth for your district (see **Appendix B** for how to calculate bandwidth). The accuracy of the ratings in the NJTRAx reports generated

	from the data is dependent upon the accuracy of these values. If your district has network monitoring software, get the latest data and reports from that system.
☐	Review the District Field Definitions, School Field Definitions, Enrollment Field Definitions, Room Field Definitions and Device Data Definitions in **Appendix C**. Though field descriptions appear in NJTRAx, these resources will provide additional clarification.
☐	Determine the testing window, sessions and sittings (see **Appendix D**). The testing window is hard-coded per PARCC recommendations to 20 days and 2 sessions per day. Future versions of NJTRAx will allow end user manipulation.
☐	List and name the rooms that will be used for testing. *Rooms are the Designated Testing centers for the NJ PARC. These are rooms for testing only and not for everyday classroom use.* Rooms should be named in ways that clearly identify them to a new user. Using an existing room number with a descriptive label, MHS LAB 203, for example, makes it easy to recognize those locations when they appear attached to devices.
☐	List and name the devices to be used for testing and assign them to the testing rooms you identified in the task above. Labeling devices consistently, such as MHS_Macbook_73, also provides information at a glance.
☐	Locate device specifications (see **Appendix E**).
☐	Review the flowcharts in **Appendix G** for information on ratings.
☐	Identify the users who should have access to NJTRAx. Users can be created and associated with organizations at two levels of NJTRAx - District and School. In this hierarchy, assigning a user to an organization at any level automatically gives them access to the level or levels below. See **Appendix H** for information on how to create users and assign access levels.

Steps for Updating your District, School, Room and Device Data

STEP 1	Login to NJTRAx http://www.njdigitallearning.org/.  This will take you to the Dashboard where you can edit your district, school, room

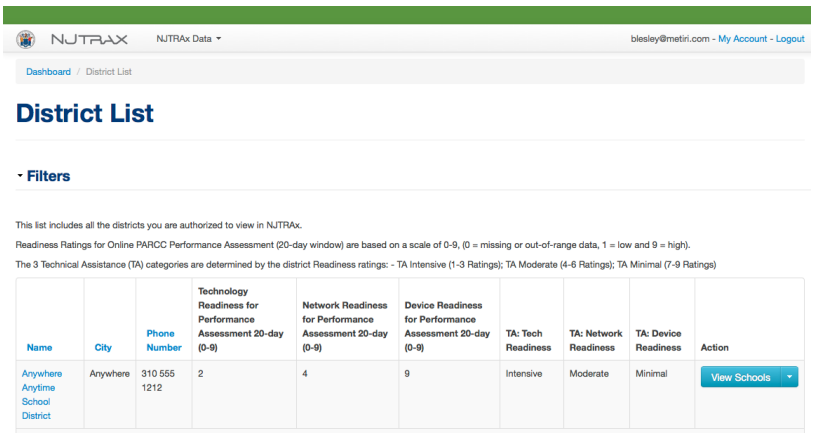
and device data.



STEP 2

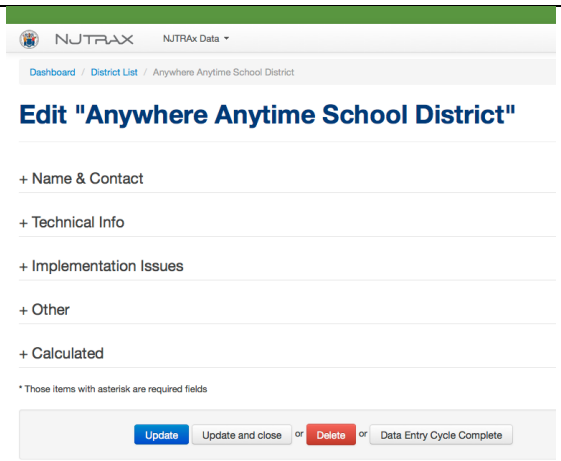
Edit districts.

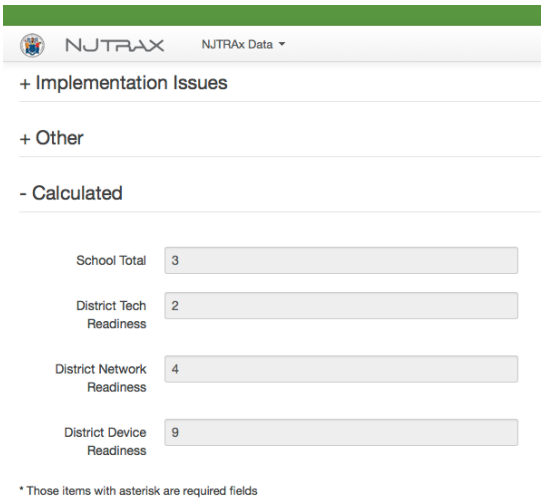
From the Dashboard, select List from the District row. Click your district.



******Note: It is important to edit in this order District > Schools > Rooms > Devices because of the way devices are connected to rooms and rooms are connected to schools.***

For each district, review and edit each of these subsections: *Name & Contact, Technical Info, Stored Report* and *Other.* The *Calculated* section shows the impact of your work so far on the district ratings (see **Appendix G** for an explanation of ratings).

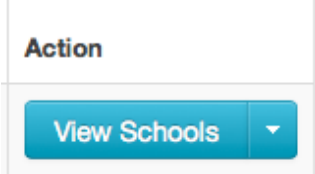




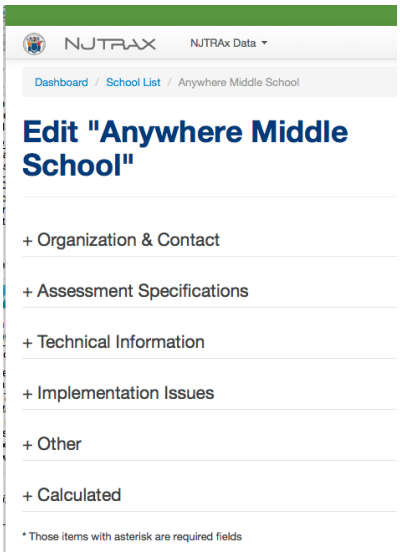
Once you are done select Update if you want to review your data, Update and Close if you are satisfied or Data Entry Cycle Complete if you are finished working with district data for this data entry cycle.

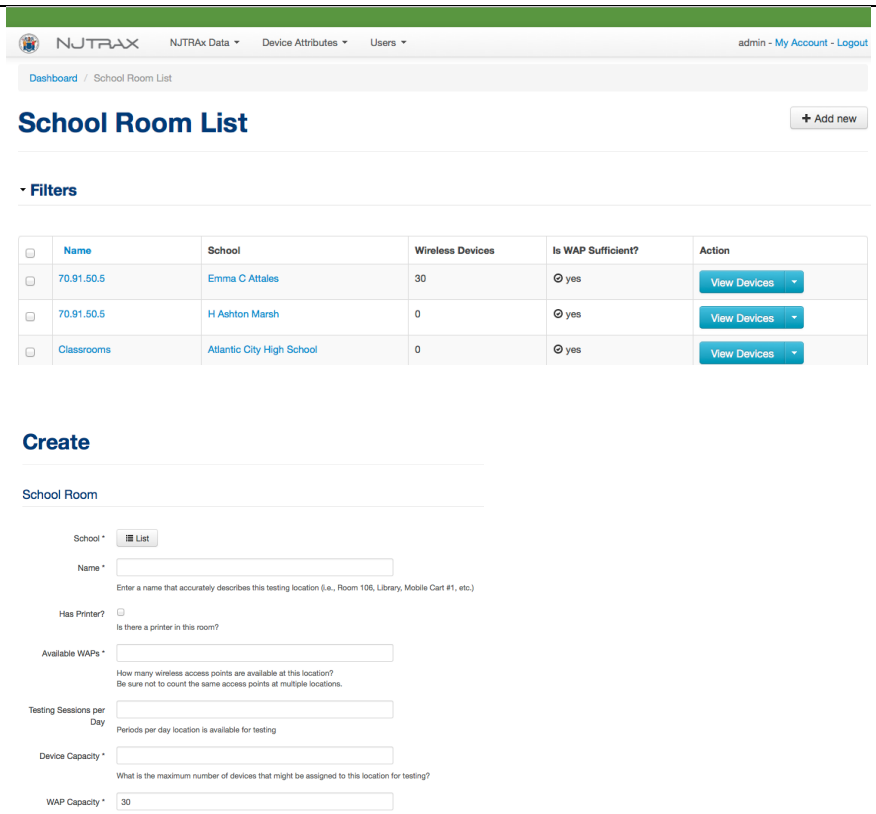
****** *IMPORTANT NOTE:*** *Navigating away from an edited record through any means other than an Update and Close or Data Entry Cycle Complete button will revert the record to its original state.*

On the **District List** page, select the drop-down menu to the right of the View School button to 1) Show District to view the district data in Read Only mode (convenient for a quick review), or to 2) Edit District information (an alternate method to selecting the blue district name on the left)



You can select the View Schools button to view the School List editor page for reviewing and updating data for each school in the district.

STEP 3	Edit schools. From the **Dashboard**, click on the "List" button next to "School." Again, clicking the school name under the name column will take you to the record for that building. You will see 7 sections: *Organization & Contact, Assessment Specifications, Technical Information, Stored Report, Implementation Issues, Other* and *Calculated*. Each section, except Calculated, should be reviewed and completed. The *Calculated* section shows the impact of your work so far on the school ratings (see **Appendix G** for an explanation of ratings). Once you are done you can click Update, if you want to review your data, or Update and Close if you are satisfied and ready to move on to the next school. 
STEP 4	Edit or enter school rooms. On the **School List** page, select the View Rooms option from the drop-down menu in the View Devices button. This takes you to the School Room List page. (*Rooms are the Designated Testing centers for the NJ PARC. These are rooms for testing only and not for everyday classroom use.)* Review the list of rooms in the Name column. To change the name of a room in the list, select the room name from the name column. An **Edit [room name]** page will appear. Edit the name and review the other fields for accuracy. To add a room, navigate back to the **School Room List** page and select the +Add New button at the top right of the page. Complete all the required fields. Be sure to Update and Close to save your changes. ***** Important: Rooms should not be deleted unless the devices associated with those rooms have been moved.*



The School Room file creates locations to which devices can be assigned. In addition, it allows for a more accurate analysis of the adequacy of Wireless Access Points (WAPs), printers and other future analyses of the adequacy of testing locations that may be added in the future. If the devices are located on carts such as laptop carts the cart itself can be entered and considered a location. However, if the cart will be used multiple rooms, the adequacy of WAPs need to be tested in each room where the cart will be located for testing.

STEP 5

Edit device data.

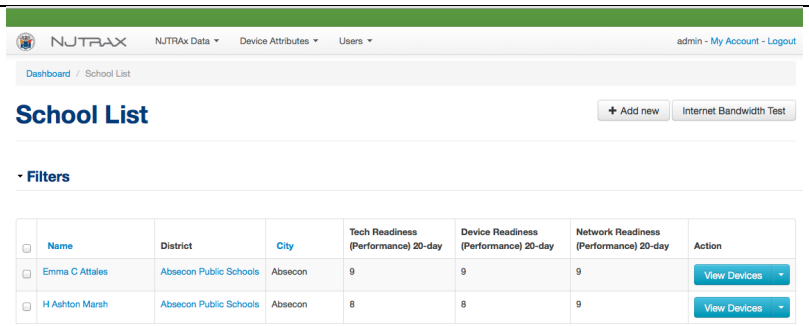
From the Dashboard, click on the “List” button next to Device. On the Device List page you have the ability to modify and/or add new Devices. Note: It is important here to create a record for each unique set of testing devices per testing room (e.g. if you have 10 of one type of device and 20 of another in one testing location you should create two testing device records and link them both to the same testing room). To modify a device, click on the device name under the name column.

Use the cluster feature to group like devices that are in the same location. It reduces the number of records and makes the job simpler. See **Appendix F** for information on how to cluster devices.

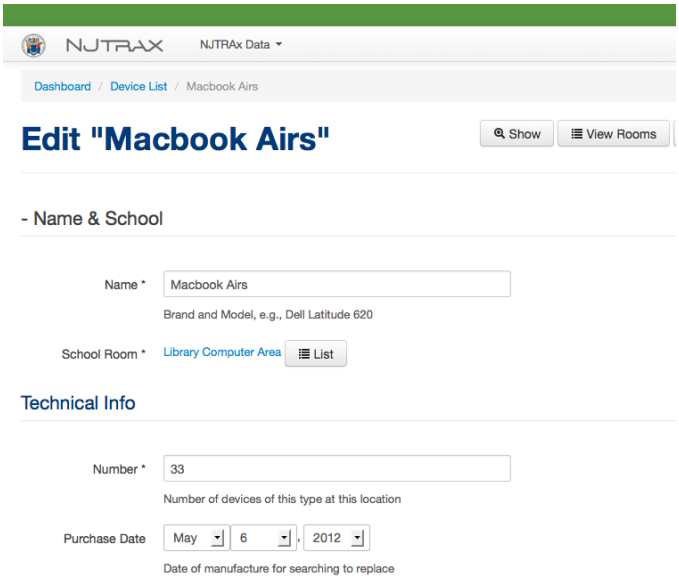
Add new devices

New devices need to be assigned to a location before they can be saved.

From the Dashboard, select “List for School. On the **School List** page, select the View Devices button for the school you would like to review. A **Device List** page will appear. Select the device name in the Name column.



You will see an “Edit [device name] page.



Enter the name for the device or cluster of devices and then use the List button to select the room for where those devices are located.

STEP 6

Await your report.

After the editing window closes a PDF of your report will be generated by NJTRAx and stored in the stored report section of your school or district record.

Appendix A: Glossary

Dark/Lit Strands. Individual fiberoptic wires that are either in use (lit) or available for future use (dark).

Internet Bandwidth. The amount of Internet data that can be accessed at any given time, usually measured in thousands or millions of bits per second.

Internet Service Provider (ISP). The vendor or organization that provides the school or district connection to the Internet.

Internet Usage. The percentage of the Internet bandwidth that is in use during a typical instructional period.

Local Area Network. The wiring, network devices and associated infrastructure that connects devices at a single site.

School Device Readiness. This is an assessment of the capacity of individual computing device readiness for use in online testing. Readiness factors include device type (laptop, desktop, tablet, etc.), processor, operating system, memory, screen size and the availability of input devices such as a mouse and keyboard.

School Network Readiness. This is an assessment of the capacity of the current network to deliver at least 20 kbps of Internet bandwidth for each testing device. Elements included in the calculation of network readiness include Wide and Local Area Network available capacity, available Internet bandwidth, and device connection types (e.g., wired or wireless) types and capacity.

Testing Enrollment. The numbers of students currently attending who are in the grade levels that will be tested. The online testing currently plans on testing students from grades 3 through high school.

Testing Location. Rooms are the Designated Testing centers for the NJ PARC. These are rooms for testing only and not for everyday classroom use.

Testing Sessions. Because each student may be tested in multiple sessions in more than one content area, the number of actual testing sessions may be more than the simple total enrollment of students in testing grades. The online tests, for example, include Language Arts and Mathematics assessments to be administered in one test session each.

Wide Area Network (WAN). Usually defined as a network that covers a large region, in education a Wide Area Network can connect all schools in a district, all districts and schools in an Intermediate School District, or all schools in a state.

Wireless Access Points (WAPs). A router or network connection device that is accessed through radio frequency waves negating the need for wires. [Replace]

Appendix B: Calculating Network Data

At the District level, NJTRAx asks several new questions related to network capacity. Questions about WAN capacity, provider information and support sources are designed to provide additional data for future support purposes.

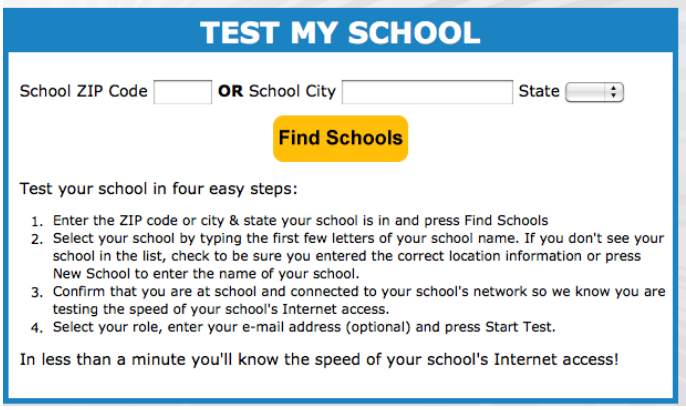
Gathering or Calculating Network Data

If your district uses a network monitoring tools such as Spiceworks, Bandwidth Monitor, or any similar tool, you probably already have a fairly good idea of the percentage of bandwidth; LAN, WAN and Internet; that you are currently using. For the purposes of online testing readiness, the key measurement that you will be asked to estimate is Available Internet Bandwidth. This is the amount of excess bandwidth that is available for use during core instructional periods. Based on the online testing estimates, the New Jersey Department of Education recommends that there be available on your network a minimum of 50 Kbps of network bandwidth for each student simultaneously taking online assessments or if using caching 5kbps of network bandwidth per student. In the absence of a sophisticated network analysis tool, there is a fairly painless and fairly accurate method for assessing the available bandwidth on your network at the district or school level. The steps in this process are:

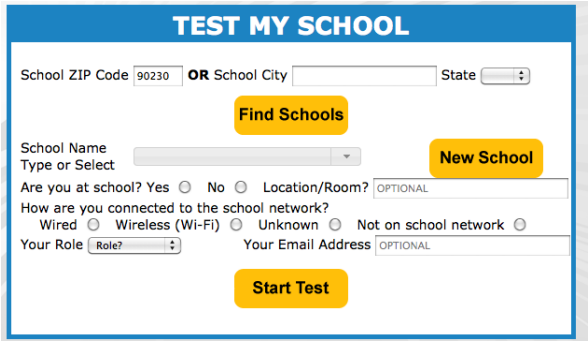
1. Determine the total amount of Internet bandwidth that you should expect to have. In virtually all cases, this bandwidth will be expressed in Megabits per second or Mbps. Checking with your Internet Service Provider (ISP) is a good starting point.

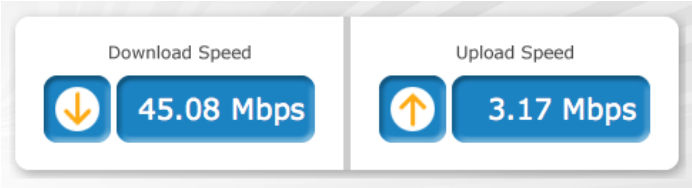
2. Determine the Internet bandwidth that is actually available during core instructional time when use is at a peak. This is typically done through speed testing software. Use *EducationSuperHighway*'s SchoolSpeedTest at http://www.schoolspeedtest.org/.
   (Alternatively, a version of this software is available through online testing courtesy of the State Educational Technology Directors Association (SETDA).)

   On the SchoolSpeedTest, Test My School page, enter your school's zip code or the school city and state and select Find Schools.



3. Complete the required information and select Start Test.





The Internet Utilization Calculation

The online testing and New Jersey bandwidth requirements are based on download speed.

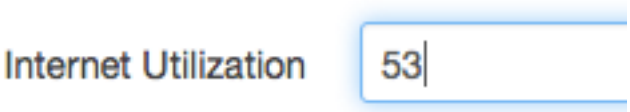
To calculate the Internet Utilization %.

1. Subtract the Download Speed (from above) from the District (or School) Internet Connection Speed. This is an estimate of the Internet bandwidth currently in use.

2. Multiply that estimate *100 and divide by the District (or School) Internet Connection Speed.

If the test above had been run for a district that had 20 Mbps Internet Connection Speed:
20-9.31= 10.69 Mbps of bandwidth in use.
10.69*100/20= 53.45% of the current bandwidth is being used.
Because Internet use varies literally by the second, this is simply an estimate of the current level of use. Repeating the procedure one or two additional times, even during different times during the school day and then averaging the percentages of use will lead to a more accurate estimate.

3. Enter the Internet Utilization percentage as a whole number into the field on the District or School record.



Appendix C: Field Definitions

District Field Definitions

District Data Definitions	Table 1
Field Name	Description
District ID	This is the New Jersey District Identifier. • It is required and pre-populated • Changes to this field require Administrative Login Access.
District Name	The District Name is used in various reports. • It is required and pre-populated • Changes to this field require Administrative Login Access.
Primary Contact Name	The person in the district that will serve as the primary contact for NJTRAx data activities • This is a required field
Primary Contact Email	• This is a required field
Address	School Address
City	School Address
State	Used for reports and possible mailing – defaults to NJ
Zip	School Zip code
District Technology Director	Do you have a district technology director? If yes, enter the name and following information:
District Technology Director Name	If yes, enter the information
District Technology Director Email	If yes, enter the information
District Technology Director Phone	If yes, enter the information
Non School Technology Servicer (NSTS)	Does the school contract for technology services rather than handle them internally? If yes, please check the box.
NSTS Name	If yes, please enter the information
NSTS Email	If yes, please enter the information
NSTS Phone	If yes, please enter the information
School Number	Please enter the number of schools in the District • This must be a numeric value
ISP Name	Enter the District's ISP name
ISP Contact	Enter the name of District's ISP contact
Overall District Device Readiness	The % of devices meeting District Device Readiness is numerically calculated (1-9) and populated
Overall District Network Readiness	The score for Network Readiness is numerically calculated (1-9) and populated
Overall District Readiness	The score for Overall Readiness is numerically calculated (1-9) and populated
Date Updated	The current date will automatically populate when the district selects: "Entry Complete: Submit"
Updated By	Enter the email of the person creating the update
Updated By Org	Enter the Name of the District/ISD who submitted the latest update
Previous Date Updated	Enter the date of previous update:: xx/xx/xxxx
Previously Updated BY	Email of the person who submitted the previous update
Updated By Org	Name of the organization who submitted the previous update

WAN?	Does the district have a Wide Area Network (WAN)? If Yes check the box. • This is a required field
WAN Type	If you checked Yes, select the item that best describes your WAN from the drop down list: Circuit Switching, Leased Line, Packet Switching, Cell Relay, Wireless WAN, PSTN (Public Switch Telephone Network), PSDN (Public Switch Data Network), Private Network, Other, Don't Know
WAN Speed	If you checked Yes, enter the speed of the Wide Area Network in Mbps
Wan Utilization_%	If you checked Yes, enter an approximation of the percent of WAN bandwidth in use (as a whole number) during core instructional periods.
ISP Connection Type	Select from one of the following in the drop down list: ISD, ISP Commercial, Cable, Telco, Other
ISP Connection Speed	Please enter in Megabits Per Second. • Enter a numeric value ONLY
ISP Connection Owner	Who owns the connection?
ISP Connection Maintenance	Who maintains the connection?
IP Phone?	Do you use VOIP? If Yes, check the box. .
Other IP Service	Are there any other services that you run over IP?
Comments	Is there anything else that the district thinks is important regarding their network or devices?
Dark Strands?	Does your district have any dark strands available but unused? If yes, check the box. • This is a required field
DS Number	If yes, enter the number of Dark Strands. • Enter a numeric value
Internet Utilization_%	Please enter as a whole number % See calculation options/instructions on page XX of MTRAx Users Guide.

School Field Definitions

School Data Definitions	Table 2
Field Name	Description
District ID	The New Jersey District Identifier. • It is required and pre-populated • Changes to this field require Administrative Login Access
School ID	The School Identifier. • It is required and pre-populated • Changes to this field require Administrative Login Access
School Name	The District Name is used in various reports. • It is required and pre-populated • Changes to this field require Administrative Login Access
Low Grade	The school's lowest grade
High Grade	The school's highest grade
Testing Enrollment	The number of students who will be tested online. This is calculated and pre-populated from the enrollment records.

School Data Definitions	Table 2
Field Name	Description
Testing Sittings Per Student	In the PARCC Performance Based Assessments, the English/Language Arts Assessment will require 2 sittings and the Mathematics PBA will require 3, for a total of 5 sittings per student.
Total Test Sittings	Total Test Sittings is calculated and populated. It is the testing enrollment multiplied by the field above
School Type	Select one from the drop down list: Public, public charter, private, etc.
Total Readiness Score	A calculated score (from 1 to 9) from a table that contains a score value for each combination of a device and network score.
Device Readiness Score	A calculated code for the device readiness at this school determined by the percentage of devices that have been identified for testing that meet MI criteria. N=Not Ready U=Ready with upgrades R=Ready
School Network Readiness Score	A calculated determination and populated as: Not Ready/Ready with Modifications/Ready
Total Testing Devices	Calculated and populated from school device reports
Total Devices Needed	Calculated and populated from the number of student test sittings divided by the number of testing periods available.
Total Ready Testing Devices	Calculated and populated from school device reports
Upgradeable Testing Devices	Calculated and populated from school device file
WAN Connection?	Is the school directly connected to a Wide Area Network? If Yes, check the box. • This is a required field
WAN Speed	Enter the speed of the Wide Area Network in Mbps
WAN Utilization	This is an approximation of the percent of WAN bandwidth in use during core instructional periods.
WAN Source	Where is the head end of your WAN? Select from a drop down list: District, ISD, Other
Non-District ISP?	Do you receive Internet from a source other than the district WAN? If Yes, check the box.
Alt ISP Type	Select from the drop down list: Commercial?, Cable, Telco, Other?
Alt ISP Name	Enter the ISP name
Internet Speed	Enter the mean speed to Internet in MBpS as a whole number
Internet Utilization	Enter the percentage of use during instructional periods as a whole number
Available Internet Bandwidth	Calculated and populated amount of Internet Bandwidth available based on the two fields above.
WAP Ready	A calculated and populated field (yes or no) based on ALL testing rooms having sufficient Wireless Access Points to accommodate wireless testing devices.
Testing Sessions Per Day	This is hard-coded to 2 sessions per day per PARCC recommendations.
Start Testing Window	Enter the date testing starts
Testing Window Days	This is hard-coded to 20 days per PARCC recommendations. Future versions of NJTRAx will allow end user manipulation.

School Data Definitions	Table 2
Field Name	Description
Total Testing Sessions	The number of available testing sessions calculated and populated by multiplying the two fields above
Testing Window Needed	A populated field that is calculated according to the number of students and devices you have entered to determine how many days you would need to test all eligible students?
Total Headphones Available	Enter the number of headphones that are available for testing • This is a required field
Prioritize?	Are you able to, or can your ISP, prioritize IP network traffic? If Yes, check the box.
Date Updated	The current date will automatically populate when *Data Entry Cycle Complete* is selected.
Submitted by	Enter the email of the person who submitted the latest update
Updated By Org	This field will automatically populate when *Data Entry Cycle Complete* is selected.
Previous Date Updated	This field will automatically populate when *Data Entry Cycle Complete* is selected.
Previous Updated By	This field will automatically populate when *Data Entry Cycle Complete* is selected.

Enrollment Field Definitions

Enrollment Data Definitions	Table 3
Field Name	Description
School ID	Select the school for this grade level.
Grade	Enter a numeric value of the grade (0-12) with 0 representing Kindergarten
Enrollment	Enter the numeric value of students in this grade
Tested?	Will this grade be tested? If Yes, check the box. This box would normally be checked for grades 3 through 11.

Room Field Definitions

Room Data Definitions	Table 4
Field Name	Description
School ID	Select the school where this room is located.
Room ID	Enter a name that accurately describes this testing location (i.e., Room 106, Library, Mobile Cart #1, etc.)
Printer?	Is there a printer in this room? If Yes, check the box. • This is required
Available WAPs	Enter a numeric value for the number of wireless access points area available at this location? • This is required
Testing Sessions Per Day	• This is hard-coded to 2 sessions per day per PARCC recommendations.

Room Data Definitions	Table 4
Field Name	Description
Capacity	Enter a numeric value for the total devices that might fit in this location? • This is required
Wireless Devices	The number of wireless Devices are calculated from the device file.
WAP Sufficient	If this box is checked there is sufficient wireless access in this room.

Appendix D: Testing Windows, Sessions and Sittings

Three key terms with which you should be familiar are testing **windows**, **sessions** and **sittings**. The test **window** is simply the number of days during which testing will be conducted. The number of “periods” that will be made available for testing during any day in the window is referred to in NJTRAx as **sessions**. In the Schools file, per PARCC recommendations, the testing window days are hard-coded to 20, and sessions at 2 sessions per day. Future versions of NJTRAx may allow end user manipulation.

An additional, equally important value is the number of sittings per student. In the online assessment program, each student will take more than one test. For the Performance Based Assessment in English/Language Arts, for example, each student will need to access a device twice. For the Mathematics PBA, 3 periods of use will be required. Each period that an individual student is tested is described in NJTRAx as a test **sitting**. The number of test sittings for the Performance Based Assessments has been hard-coded in NJTRAx at 5.

When checking for adequate numbers of devices, simply comparing the number of students to be tested to the number of devices available multiplied by the number of testing sessions available would be an adequate strategy only if each student were taking a single test. The true testing load begins with multiplying the number of students to be tested during a given window by the number of sittings that will be needed by each student. The number of sittings in the current implementation of NJTRAx is set to 5.

Appendix E: Locating Device Specifications

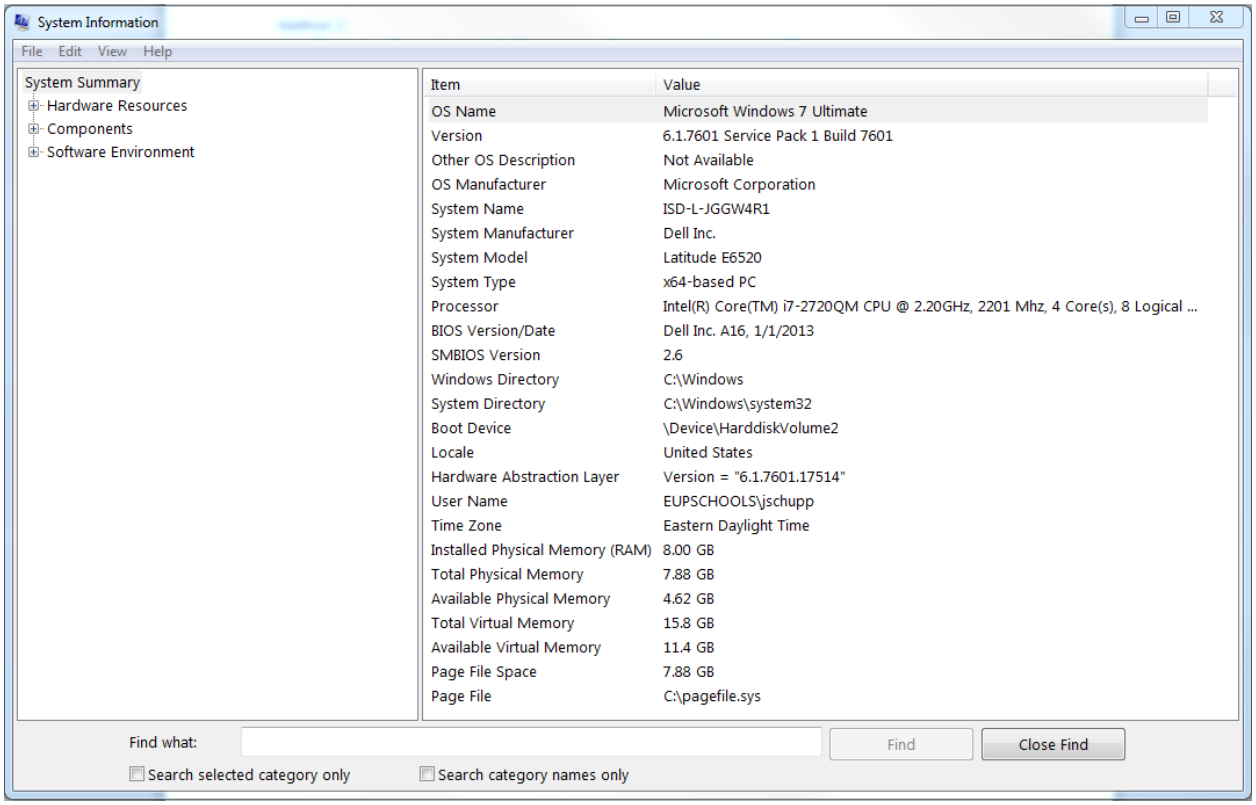
NJTRAx Technology Readiness Tool
Operating System Information "How To"

Windows XP, Vista, 7

"System Information (also known as msinfo32.exe) shows details about your computer's hardware configuration, computer components, and software, including drivers."

Method 1:
Open System Information by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **System Tools**, and then clicking **System Information**.

Method 2:
Click **Start**, click **Run**, type **msinfo32.exe** in the **Open** box, and then click **OK**.



Windows 8
From the Start screen window of Windows 8 move the cursor to the bottom right of the screen and click the **search box**. In the search box type "System Information", then click on the Apps tab on the right sidebar and then click "System Information" in the main window. A new window named "System Information" will be displayed and will look similar to the Windows XP/Vista/7 screen shown above.

Apple OS X and IOS

Apple OS X
"From the **Apple** ( ) menu, choose **About This Mac**. The About This Mac window shows your OS X version number."

Apple IOS (iPad)
Press the Home button to access the iPad home screen and the tap the 'Settings' icon to access the setting page. Tap the 'General' link and then tap the 'About' link to display the iPad Operating System version.

Chromebooks

Given the non-resident nature of software on Chromebooks, the easiest way to gather the specifications is one of two methods. First, of course, would be to, access the vendor's Web site. For the recently released HP Chromebook 14, for example, the HP Website provides all of the needed characteristics in a single illustrative paragraph.

Video

Part: F0G99UA#ABA UPC: 888182131381

HP Chromebook 14-q010nr(ENERGY STAR)

Write the first review

Connects to your favorite Web sites and Google Chrome apps in seconds, stylish design

Operating system - Chrome OS
Processor - Intel® Celeron® 2955U with Intel HD Graphics (1.4 GHz, 2 MB cache, 2 cores)
Screen size - 14" diagonal HD BrightView LED-backlit (1366 x 768)
Memory - 2 GB 1600 MHz DDR3 (on-board)
Hard drive - 16 GB SATA SSD

In addition, Web resources such as the Chromebook article in Wikipedia offer comprehensive tables of specifications for virtually every brand and model of Chromebook.

(This is a partial screen shot taken from http://en.wikipedia.org/wiki/Chromebook)

Chromebook models							
Available	**Brand**	**Model**	**Processor**	**Battery life**	**RAM**	**Storage**	**Screen size**
Dec 2010	Google	Cr-48 (prototype)	1.66 GHz Intel Atom N455	9 hours	2 GB DDR3	16 GB SSD	12.1 in (30.7 cm)
Jun 2011	Samsung	Series 5 XE500C21	1.66 GHz Intel Atom N570	6.5 hours	2 GB DDR3	16 GB SSD	12.1 in (30.7 cm)
Jul 2011	Acer	AC700	1.66 GHz Intel Atom N570	6 hours	2 GB DDR3	16 GB SSD	11.6 in (29.5 cm)
May 2012	Samsung	Series 5 XE550C22	1.3 GHz Intel Celeron 867[58]	6 hours	4 GB DDR3	16 GB SSD	12.1 in (30.7 cm)
Oct 2012	Samsung	Series 3 XE303C12	1.7 GHz Samsung Exynos 5 Dual[62]	6.5 hours	2 GB DDR3	16 GB SSD, 100 GB Google drive storage for 2 years	11.6 in (29.5 cm)
	Acer	C7 C710-2055	1.1 GHz Intel Celeron 847	4 hours	4 GB DDR3	320 GB HDD	11.6 in (29.5 cm)

Android Tablets

As with Chromebooks, Android devices typically offer few specifics related to device characteristics. However, manufacturer's Websites typically offer lists of specifications that are clear and comprehensive. Illustrated below, for example, are the specifications for the Trio Stealth Pro, clearly indicating that this model does not meet PARCC minimum specifications.

FEATURES // SPECS // GALLERY // SUPPORT

AVAILABLE COLOR
[SELECT A COLOR

OS: Android 4.0
CPU:
A10 Cortex A8 1.2gHz, Multi-Core
Graphics:
Dual Mali-400 2D/3D core
RAM:
512MB DDR3
Display:
7inch Capacitive Touch Screen LCD
Resolution:
800X480 pixels
Touch Panel:
Capacitive touch panel (Multi-touch), Built-in Mic
Wireless LAN:
Realtek 8188, USB_module
Camera:
Front 300K pixel camera
Video Support:
AVI, (H.264, DIVX, XVID, rm, rmvb, MKV, WMV, MOV, MP4 (H.264, MPEG, DIVX, XVID), MPEG, MPG, FLV. HD 1080P max.
Audio Support:
MP3, WMA, MP2, OGG, AAC, M4A, MA4, FLAC, 3GP, WAV
Picture Support:
JPG, JPEG, GIF, BMP, PNG
Battery:
3.7V/2800mAh, (4hours work time)
DC Adapter:
INPUT:AC100-240V.50-60HZ, OUTPUT : DC5V 1.5A

Ubuntu / Linux

Linux Command Line … available for all “flavors” of Linux.
Open a terminal window and enter the following commands;

1. [root@linux ~]: cat /proc/cpuinfo

```
processor       : 0
vendor_id       : GenuineIntel
cpu family      : 6
model           : 15
model name      : Intel(R) Xeon(R) CPU X5650  @ 2.67GHz
```

The first few lines from returned from this command will provide information on the device CPU.

2. [root@linux ~]: cat /proc/meminfo

```
MemTotal:       5994612 kB
MemFree:         607640 kB
Buffers:        545264 kB
Cached:        2882748 kB
SwapCached:        5796 kB
Active:        3361504 kB
```

The first line returned from this command will provide the total device memory.

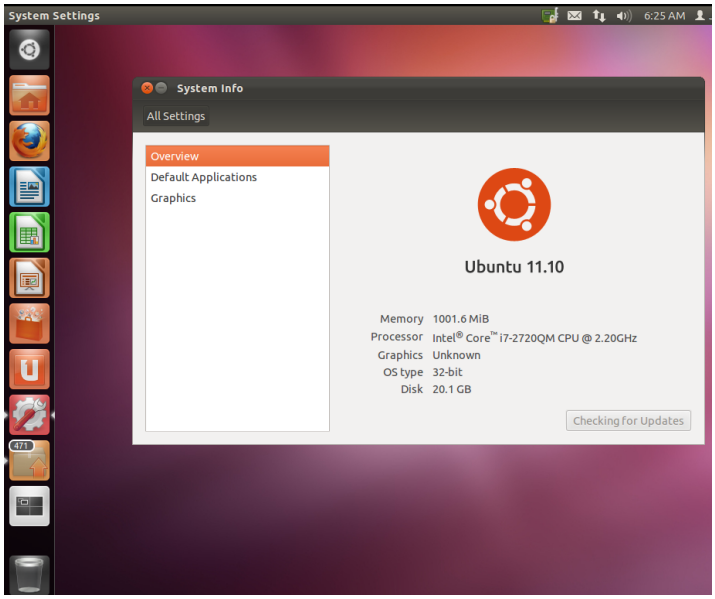
3. [root@linux ~]: cat /proc/version

```
Linux version 2.6.32-279.19.1.el6.x86_64
(mockbuild@c6b8.bsys.dev.centos.org) (gcc version 4.4.6 20120305
(Red Hat 4.4.6-4) (GCC) ) #1 SMP Wed Dec 19 07:05:20 UTC 2012
```

The first few lines from returned from this command will provide information on the device Operating System version.

Ubuntu 11.x / 12.x

From the dash home screen, click the System Settings icon and then click the 'System Info' icon to display the system information screen.

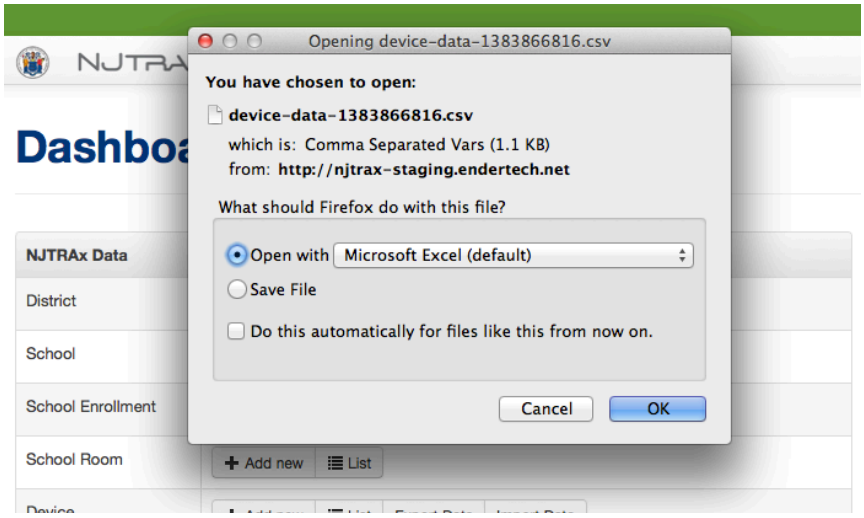


Linux Gnome
Click on the Applications link on the main menu, click System Tools and then click System Monitor.

Import/Export with Excel

Some districts may find it easier to upload their device data anew rather than editing those data in NJTRAx. This is particularly true if your district has a sophisticated asset management system. To facilitate this process, NJTRAx has a device export/import capability that can either create a comma separated value (CSV) file or import your data from the same file type. CSV files are easily created in Microsoft Excel or in most database software.

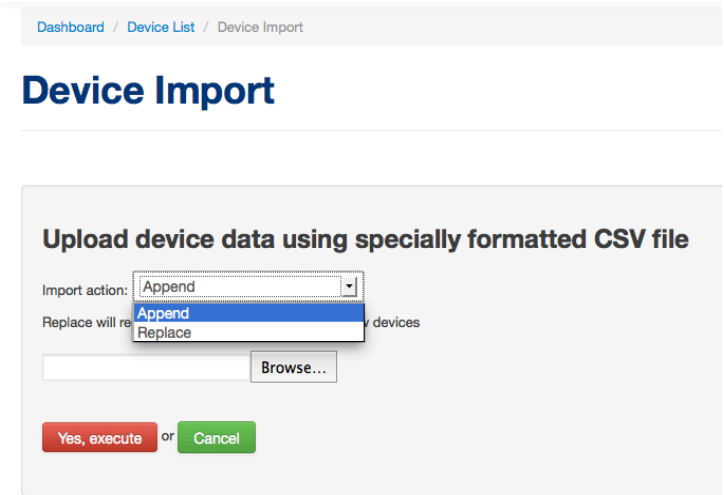
To export a file, simply go to the Data Editor and, next to devices, click the button that is labeled "Export Data" (see illustration below.) Note that there are two export buttons. One will, Export Report, will export your device information with all calculated fields. This is the file that NJTRAx uses to produce reports. The second, "Export Data" exports only the descriptive data related to your devices in a format that is simple to review, edit, and re-import if necessary. A sample of the Export Data CSV file can be found on the NJTRAx.org home page.



An additional button is labeled Import Data. This button will import data from a CSV file of your own creation. The file must be formatted properly to be accepted by NJTRAx. The format of the file, a template spreadsheet and a description of the appropriate values for each field can be found on the NJTRAx.org home page. When importing data there is an important decision that must be made. This is whether the data imported will be appended or added to, the existing data or replace those data. SELECTING REPLACE WILL OVERWRITE THE DEVICE FILE IN NJTRAX! Use this function judiciously. To import device data:

1. Prepare your device data using the tools on the NJTRAx home page and export as a CSV file.
2. Navigate to the Data Editor
3. Click the "Import Data" button
4. Use the dropdown to select "Append" or "Replace."
5. Browse your computer to locate the CSV file.
6. Click "Yes, Execute."
7. If unsure, click "Cancel"

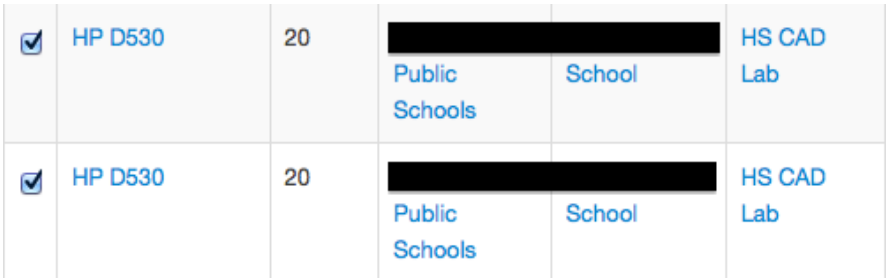
If any device records contain incomplete or erroneous data, a series of messages will appear telling you the row of the spreadsheet that could not be imported and which field caused the error.


Dashboard / Device List / Device Import
Device Import
Upload device data using specially formatted CSV file
Import action:
Append
Append
Replace
devices
Browse...
Yes, execute
or
Cancel

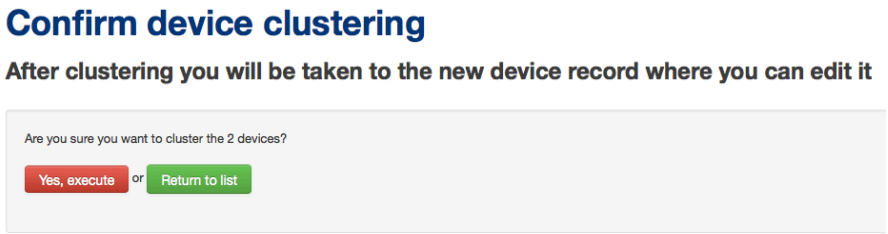
Appendix F: Clustering Devices

Another “ease or use” function that has been added to NJTRAx is the clustering feature. Some users of the TechReadinessTool imported their device data from inventory management software which is usually configured so that each exported record is a single computing device. But both TRT and NJTRAx are designed with device records that can accommodate clusters of similar devices. Dealing with 3 records representing 3 clusters of 30 machines each that share all essential characteristics and are in the same location is more convenient and efficient than dealing with 90 individual records. To address this, NJTRAx allows user to cluster devices with similar characteristics; OS, memory, processor, etc. that are in the same location. To do this:

1. Go to the Data Editor
2. Select “Devices”
3. From the device list, select the similar devices in the same location



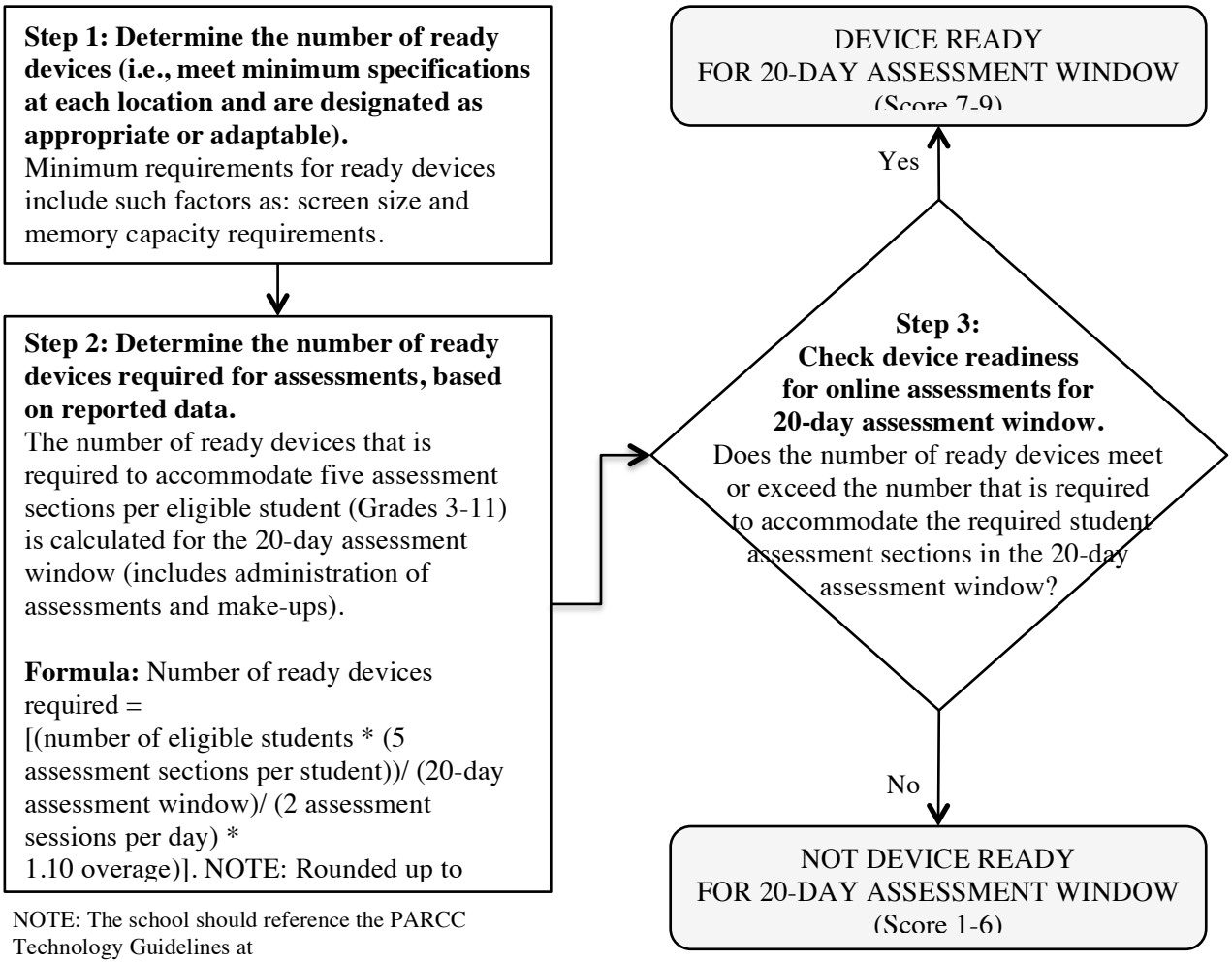
4. At the bottom of the device list, click the “Cluster” button.
5. You will be asked to confirm.



After the clustering is complete, you will be taken to the new record for any edits. The individual records that have been clustered are deleted.

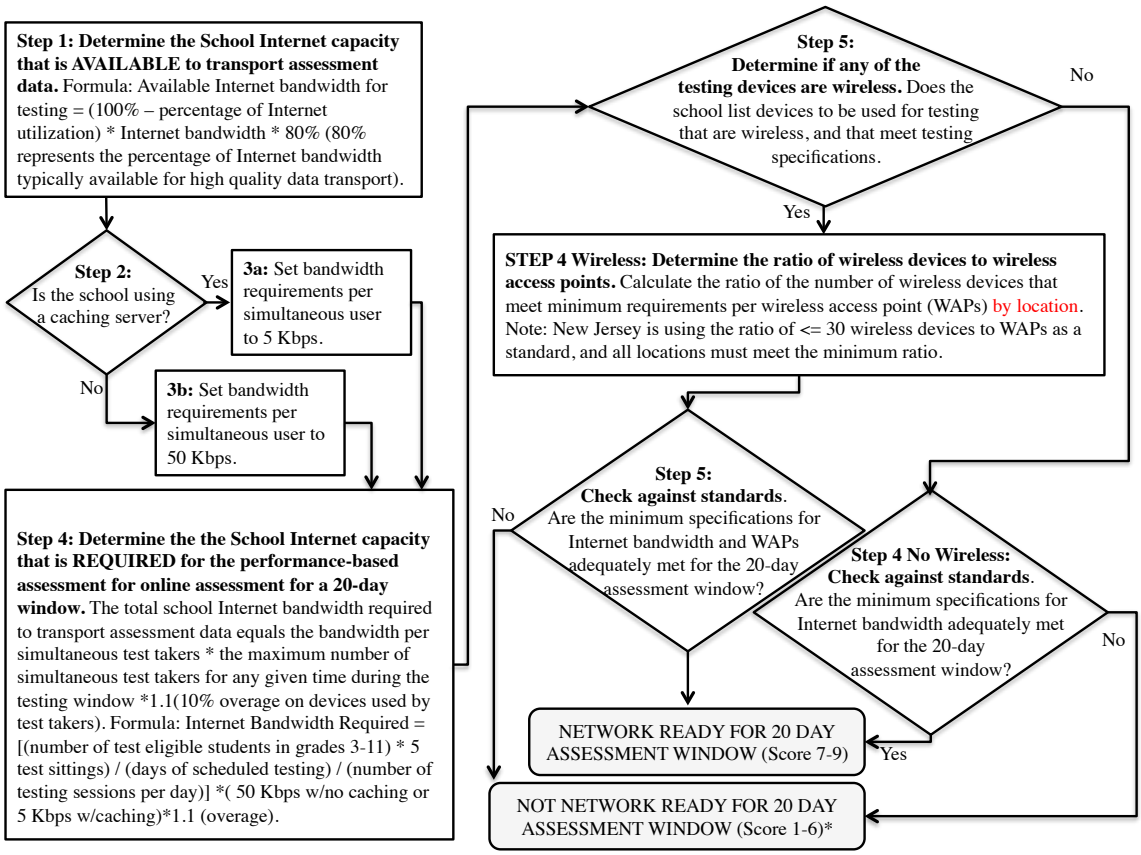
Appendix G: Flowcharts and Calculation Examples

Flowchart for calculating device readiness



NOTE: The school should reference the PARCC Technology Guidelines at http://www.parcconline.org/technology to see if headphones, microphones, and keyboards need to be made available for various assessments. Accommodations may need to be made for students with disabilities.

Flowchart for school network readiness



Appendix H: User Roles

What are the different user roles in NJTRAx?

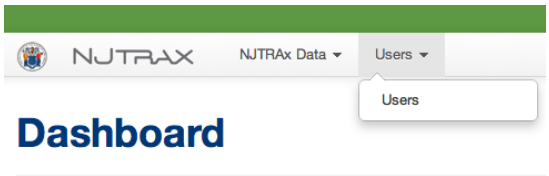
Users can be created and associated with organizations at two levels of NJTRAx, District and School. In this hierarchy, assigning a user to an organization at any level automatically gives them access to the level or levels below. For example, creating a user and assigning them as a District level user gives that user access to all schools in the district as well.

There are three types of users that might be assigned.

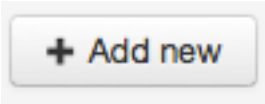
1. Read only users – Read only users, as the name implies, can see the data in NJTRAx for the schools and districts to which they are assigned but cannot add to or edit those data. This user type is useful for district leaders who want to remain apprised of the status of NJTRAx data but may not be involved in editing those data.
2. Read/Write users – These users can view and edit NJTRAx data for the organizations with whom they are associated. Creating a read/write District level user gives that user read/write access to the schools in that district as well.
3. Master Users – Master Users are users that, in addition to being read/write users, can also create new users at their organizational level or below.

How do I create a new user?

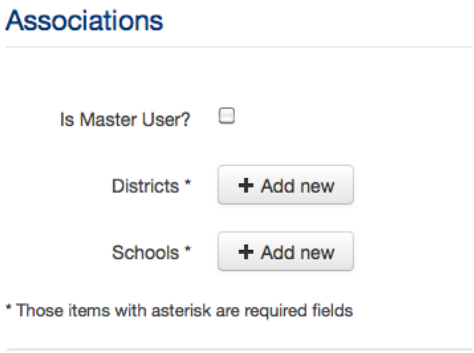
To create a new user simply go to your user list in the Data Editor using the User menu at the top left.



Click the “Add new” button at top right of the User List



Complete the user record. The top portion of the record is fairly straightforward. Enter the email, password, etc. In the Associations section at the bottom, click the “Add New” button next to any organization or organizations with which you wish to associate this user. You will only see organizations for which you have Master User rights.



You will need to decide whether, for the organization you are adding, the user should have read/write access and whether the user should be a “Master User.” Again, Master Users can create new users at their own level and below.

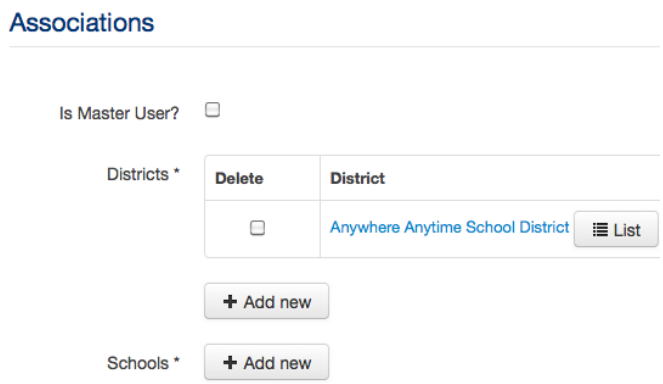
Click “Update” or “Update and Close.”

THE DELETE BUTTON ON THE USER RECORD DELETES THE USER!

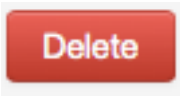
How do I edit a user in NJTRAx?

To edit a user in NJTRAx, simply go to the user list as described above and click on the username of the user you wish to edit and, upon completing the edits, click “Update” or “Update and Close.” The most common edits you will make involve changing a users Associations.

To remove an association from a user, simply click the checkbox in the column labeled “Delete” in the Associations section then Update the record.



DO NOT USE THE DELETE BUTTON TO DELETE ASSOCIATIONS! The Delete button deletes the entire user!



How do I delete users?

To delete a user in NJTRAx, simply go to the user list as described above and click on the username of the user you wish to delete. At the bottom of the user record, click the red Delete button.