



# NEW JERSEY

DIGITAL LEARNING AND ASSESSMENT PORTAL

## Quick Start Guide



**NJTRAX**  
NEW JERSEY TECHNOLOGY READINESS TOOL

## ***Quick Start Guide: Updating NJTRAx***

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### **Overview of NJTRAx**

The New Jersey Department of Education (NJDOE) originally established NJTRAx to gauge the technology readiness of New Jersey schools and districts for online testing. The district and school technology datasets are now also used to inform the annual School Performance Reports and the NJDOE analysis of remote learning due to COVID-19 Remote. The NJTRAx database is designed to collect and store the datasets that inform those reports. District Technology Directors are asked to update their NJTRAx records annually.

Note: As of 9/1/2020, the enrollment numbers in NJTRAx are the latest available from NJDOE.

### **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. New users should use both the following processes. Those familiar with NJTRAx are welcome to jump directly to #2.

1. ***Preparation for Editing NJTRAx Checklist*** (see page 2).  
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. ***Steps for Updating Your District, School, Room, and Device Data*** (see page 3).  
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.

While this *Quick Start Guide* shows you a way to navigate through the NJTRAx tool, there are multiple ways to navigate through the site.

### Preparation Checklist for Editing NJTRAx

✓	TASK
<input type="checkbox"/>	<b>Terminology – Appendix A.</b> Review the basic networking terminology. 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.
<input type="checkbox"/>	<b>Internet Bandwidth – Appendix B.</b> Determine your reported internet bandwidth for your district. 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.
<input type="checkbox"/>	<b>Field Definitions – Appendix C.</b> Review the District Field Definitions, School Field Definitions, Enrollment Field Definitions, Room Field Definitions and Device Data Definitions in <b>Appendix C</b> . Though field descriptions appear in NJTRAx, these resources will provide additional clarification.
<input type="checkbox"/>	<b>Testing Window - Appendix D.</b> The testing window, which is hard-coded per Statewide Assessment recommendations to 30 days and 2 sessions per day.
<input type="checkbox"/>	<b>Location of Devices.</b> List and name the rooms that will be used for testing and which devices are located in those rooms. If your school has mobile devices and schoolwide wifi, the room location for the wireless sets of devices will be “Schoolwide.”
<input type="checkbox"/>	<b>Devices.</b> List and name the sets of devices to be used for testing, digital learning, and/or remote learning. You will be asked to complete a set of fields related to each set of devices. Labeling devices consistently, such as MHS_Macbook_73, also provides information at a glance.
<input type="checkbox"/>	Device Specifications – Appendix E. Locate and review device specifications.
<input type="checkbox"/>	<b>Clustering devices - Appendix F.</b> If your inventory lists all your devices individually, you will be able to import that inventory and then cluster the devices into sets within NJTRAx.
<input type="checkbox"/>	<b>Readiness Ratings - Appendix G.</b> Review the flowcharts in for information on ratings.
<input type="checkbox"/>	<b>Authorized NJTRAx Users – Appendix H.</b> 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 Logging In and Navigating in NJTRAx

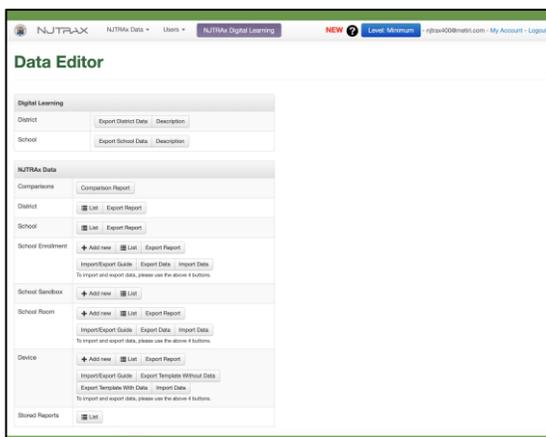
Login to NJTRAx <http://www.njdigitallearning.org/>.



This will take you to an information/jump page.



To edit your records, click on the Data Editor button.



**STEP 2 Edit District Records**

In the Data Editor, go to the District row, and click on *List*. Then select your district.

**District List**

**- Filters**

This list includes all the districts you are authorized to view in NJTRAx.  
 Readiness Ratings for Online Performance Assessment (30-day window) are based on a scale of 0-9, (0 = missing or out-of-range data, 1 = low and 9 = high).  
 The 3 Technical Assistance (TA) categories are determined by the district Readiness ratings - TA Intensive (1-3 Ratings), TA Moderate (4-6 Ratings), TA Minimal (7-9 Ratings)

Checkbox	Name	City	Phone Number	Date Updated	Date Submitted	Minimum Specs			Recommended Specs			Ratings do not reflect DLM requirements	Action
						Readiness for Performance Based Assessment (30-day window) (Scoring 0-9)			Readiness for Performance Based Assessment (30-day window) (Scoring 0-9)				
						Tech	Network	Device	Tech	Network	Device		
<input type="checkbox"/>	Anywhere Anytime School District	Anywhere	310 555 1212	2020-09-22	2019-03-29	6	6	6	6	6	6	<input checked="" type="checkbox"/> yes	<a href="#">District Readiness Report</a>

All Districts

1 / 1 - 1 result - Per page 32

**\*\*\*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.**

In the district record, open each of the first two tabs (*District Name & Contact* and *Technical Information*), review the data and update. The other two tabs, *Submissions and Updates* and *Calculated* are view only.

**Edit "Anywhere Anytime School District"**

NOTE: The fields with an asterisk (\*) are required fields.

+ District Name & Contact

+ Technical Information

+ Submissions and Updates

+ Calculated

\* Those items with asterisk are required fields

Update and close or Data Entry Cycle Complete

Once you are done, select *Update*, *Update and Close*, or *Data Entry Cycle Complete*. The latter indicates that you are finished working with district data for this 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.

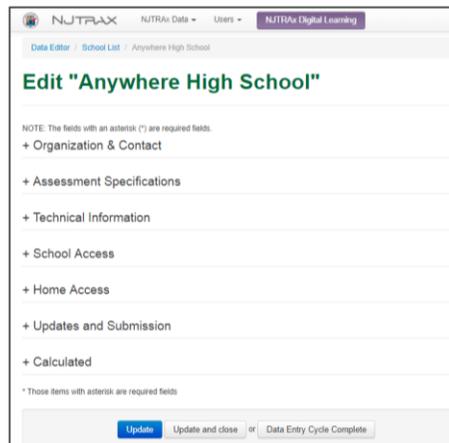
**District Report**

To get a district report go to the [District List](#) page, click [District Readiness Report](#).

District List													
- Filters													
<p>This list includes all the districts you are authorized to view in NJTRAx.</p> <p>Readiness Ratings for Online Performance Assessment (30-day window) are based on a scale of 0-9, (0 = missing or out-of-range data, 1 = low and 9 = high).</p> <p>The 3 Technical Assistance (TA) categories are determined by the district Readiness ratings - TA Intensive (1-3 Ratings), TA Moderate (4-6 Ratings), TA Minimal (7-9 Ratings)</p>													
Checkbox	Name	City	Phone Number	Date Updated	Date Submitted	Minimum Specs			Recommended Specs			Ratings do not reflect DLM requirements	Action
						Tech	Network	Device	Tech	Network	Device		
<input type="checkbox"/>	Anywhere Anytime School District	Anywhere	310 555 1212	2020-09-22	2019-03-29	6	6	6	7	6	7	<input checked="" type="checkbox"/> yes	<a href="#">District Readiness Report</a>
<input type="checkbox"/> All Districts <input type="button" value="Export Report"/> <input type="button" value="OK"/>													
1 / 1 - 1 result - Per page 32													

**STEP 3 Edit School Records**

On the Data Editor page, in the School row, click on “List.” Once you see the [School List](#), click on a school to begin editing. The tabs in the School’s record includes: *Organization & Contact*, *Assessment Specifications*, *Technical Information*, *School Access*, *Home Access*, *Updates and Submission* and *Calculated*. Each section, except *Calculated* (which is view only), should be reviewed and completed. After updating each section be sure you click *Update* or *Update and Close* before leaving the page.



**Note1:** The School Access and Home Access tabs were added in the Fall of 2020 and will need to be completed for all schools.

**Note2:** In the School Access tab, when the Schoolwide Wi-Fi box is checked for a school, a room location of “Schoolwide” is automatically added. The room location for wireless devices added to your inventory will be Schoolwide.

**School Report**

To access a School Report, return to the School List and click on the Readiness Report.

**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.

Note: If your school has mobile devices and schoolwide Wi-Fi, the room location for any new

wireless devices added to NJTRAx should be “Schoolwide.”

*(Rooms are the Designated Testing centers for Statewide Assessment testing. 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.**

Name	School	Ready Testing Devices (via Wireless)	Ready Testing Devices (Wired)	Is WAP Sufficient?	Action
Library Media Center	Anywhere High School	60	1009	Yes	View Devices
Rowing set of #rad 4	Anywhere High School	0	0	N/A	Edit Room Show Room
West Wing	Anywhere High School	0	0	N/A	View Devices
Mobile Cart #2	Anywhere High School	0	0	N/A	View Devices
Lauren's 2nd test	Anywhere High School	0	0	N/A	View Devices
Lauren's 3rd test_11_19	Anywhere High School	0	0	N/A	View Devices

**Create**

NOTE: The fields with an asterisk (\*) are required fields.

**School Room**

School \*

Name \*

Available WAPs \*

WAP Capacity \*

Testing Sessions per Day

Potential Device Capacity

Assessment Environment \*

School Rooms Suitable for Testing?  
 Appropriate = Current environment appropriate for assessment  
 Adaptable = Moveable to environment appropriate for assessment  
 Inappropriate = Current environment NOT appropriate for assessment and NOT sufficiently mobile to move to one

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). 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 Records for a Specific School**

From the Data Editor, go to the School row and click on a School. Once in the School Record, locate the View Devices button in the top row and click it.

**Edit "Metiri Middle School"** Show View Readiness Report Revisions View Devices View Rooms View Enrollments Return to list

NOTE: The fields with an asterisk (\*) are required fields.

+ Organization & Contact

+ Assessment Specifications

+ Technical Information

+ School Access

+ Home Access

+ Updates and Submission

+ Calculated

\* Those items with asterisk are required fields

Update Update and close or Data Entry Cycle Complete

That will bring up the Device List filtered for your selected school. To modify existing sets of devices, click on the Edit Device button at the right of the row.

**Device List** + Add new

- Filters

<input type="checkbox"/>	Name	Count	District	School	School Room	Type	Operating System	Manufacturer	Memory	Device(s) Ready?	Used for Testing	Used for Digital Learning	Used for Remote Learning	Action
<input type="checkbox"/>	Chromobook	200	Anywhere Anytime School District	Anywhere Elementary School	Anywhere Elementary School - Chrome Laptop Cart #1	Laptop	Chrome OS meets tech specs	LG	2GB	✓ yes	⊗ no	✓ yes	✓ yes	<span>Edit Device</span>
<input type="checkbox"/>	LENOVO-3F2FB1B4	650	Anywhere Anytime School District	Anywhere High School	Anywhere High School - Library Media Center	Laptop	Windows 7	Lenovo	2GB	✓ yes	✓ yes	✓ yes	✓ yes	<span>Edit Device</span>
<input type="checkbox"/>	MacBook	515	Anywhere Anytime School District	Anywhere Middle School	Anywhere Middle School - East Wing BYOD	Laptop	iOS 12.x	Apple, Inc.	2GB	✓ yes	✓ yes	✓ yes	✓ yes	<span>Edit Device</span>

All Devices Cluster OK 1 / 1 - 3 results - Per page 32

The action buttons at the bottom left of the screen enables you to Cluster devices into one record, export a report of the devices on your screen, and delete sets of devices.

**Device List** + Add new

- Filters

<input type="checkbox"/>	Name	Count	District	School	School Room	Type	Operating System	Manufacturer	Memory	Device(s) Ready?	Used for Testing	Used for Digital Learning	Used for Remote Learning	Action
<input type="checkbox"/>	Chromobook	200	Anywhere Anytime School District	Anywhere Elementary School	Anywhere Elementary School - Chrome Laptop Cart #1	Laptop	Chrome OS meets tech specs	LG	2GB	✓ yes	⊗ no	✓ yes	✓ yes	<span>Edit Device</span>
<input type="checkbox"/>	LENOVO-3F2FB1B4	650	Anywhere Anytime School District	Anywhere High School	Anywhere High School - Library Media Center	Laptop	Windows 7	Lenovo	2GB	✓ yes	✓ yes	✓ yes	✓ yes	<span>Edit Device</span>
<input type="checkbox"/>	MacBook	515	Anywhere Anytime School District	Anywhere Middle School	Anywhere Middle School - East Wing BYOD	Laptop	iOS 12.x	Apple, Inc.	2GB	✓ yes	✓ yes	✓ yes	✓ yes	<span>Edit Device</span>

All Devices Cluster OK 1 / 1 - 3 results - Per page 32

- Cluster
- Export Report
- Delete

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.

**Note:** An alternative way to access the device list is to go to the Device row and click on List.

**Add new devices**

Bring up the **Device List** as described above. Click on the +Add New button in the upper right.

**Device List** + Add new

**Filters**

Name:

School:

School Room:

Is For Testing:

Is For Digital Learning:

Type:

Operating System:

Manufacturer:

Memory:

Device(s) Ready?:

Product Satisfaction Level:

Support Satisfaction Level:

<input type="checkbox"/>	Name	Count	District	School	School Room	Type	Operating System	Manufacturer	Memory	Device(s) Ready?	Used for Testing	Used for Digital Learning	Used for Remote Learning	Action
<input type="checkbox"/>	Chromebook	30	Metri School District	Metri Middle School	Metri Middle School - Media Center	Desktop	Chrome OS: meeta tech spaces	Gateway, Inc.	8GB	✓ yes	⊙ no	✓ yes	⊙ no	<input type="button" value="Edit Device"/>
<input type="checkbox"/>	Dell Optiplex 380	12	Metri School District	Metri Middle School	Metri Middle School - Media Center	Desktop	Windows 7	Dell Technologies	8GB	✓ yes	✓ yes	✓ yes	⊙ no	<input type="button" value="Edit Device"/>
<input type="checkbox"/>	WMS_197_DCS800	30	Metri School District	Metri Middle School	Metri Middle School - Media Center	Desktop	OS 8.1	Apple, Inc.	iPad memory	⊙ no	✓ yes	⊙ no	⊙ no	<input type="button" value="Edit Device"/>
<input type="checkbox"/>	iPad	100	Metri School District	Metri Middle School	Metri Middle School - Schoolwide	Tablet	iOS 12.x	Apple, Inc.	2GB (iPad mini)	✓ yes	⊙ no	✓ yes	✓ yes	<input type="button" value="Edit Device"/>

That action will bring up a screen where you can fill in all the fields for your new device record.  
**Tips:**

- You must choose a School Room for your new set of devices. Clicking on the List button will bring up your options for existing school rooms. Filtering for the school in which the devices will be located will show you the room locations in that school.
- If your school has mobile devices and schoolwide wifi you will want to choose Schoolwide for your room location.

**Create** + Add new Returns to list

Before adding devices, be sure you have established the school room where these devices will be located.  
 If you have indicated that your wifi is schoolwide, the school room should be "Schoolwide".  
 NOTE: The fields with an asterisk (\*) are required fields.

Name & School

Name \*

Brand and Model, e.g., Dell Latitude 620

School Room \*

Technical Information

Number \*

Number of devices of this type at this location

Devices assigned to teachers/admin? \* How many of these devices are assigned to a teacher or administrator?

Used For Testing?

Is this device or group of devices used for testing?

Used for Digital Learning?

Is this device or group of devices used for digital learning?

Used for remote learning?

Is the device used for remote learning/instruction (i.e., used in homes)?

Type \*

Operating System \*

Manufacturer \*

Memory \*

Product (level of satisfaction) \*

Rate on a scale of 1-4 where 1=Low, 4=High

Product support (level of satisfaction) \*

Rate on a scale of 1-4 where 1=Low, 4=High

Cost of device? \*

What is the cost of each device?

Cost of device replacement? \*

What is the cost of the replacement per device (e.g., insurance, administrative configuration, core software, carrying case, peripherals such as keyboards or headphones, etc.)

Primary Funding Source \*

Secondary Funding Source \*

\* Calculated

\* These items with asterisk are required fields

Note: It is important here to create a record for each unique set of devices in the school.

### Import/Export

An alternative method for adding devices is to use the import function. (See [Appendix I](#) for Export/Import instructions.)

## Appendix A: Glossary

**Dark/Lit Strands.** Individual fiber optic 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.

**Remote Learning.** This is where students are learning online at a site that is remote from the school building and the teacher.

**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.

**School Room Location.** Rooms are the location in which the testing devices will be used, or for instructional devices, where they are located. In instances of 1:1 or BYOD programs these room locations can be the “school,” or sections of the school (e.g., East Wing) where the students in the program are scheduled during the day.

**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 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.

**Test Sitting Per Student.** The test sitting per student is the total number of times each individual student will need to attend a testing session to complete the test administration. For example: currently at grade level 6-11, the number of test sittings per student is seven (7).

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

**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.

## 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. Statewide Assessment specifications require 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.

### The Internet Utilization Calculation

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.

Example:

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.

Internet Utilization

## Appendix C: Field Definitions

### District Field Definitions

**Note: \* are required fields**

District Data Definitions	Table 1				
Field Name	Description				
County Office of Education					
District Name*	The District Name is used in various reports. Changes to this field require Administrative Login Access.				
State Code*					
Address	School Address				
City	School Address				
State	Used for reports and possible mailing – defaults to NJ				
Zip	School Zip code				
Phone Number					
Demographic*	Dropdown list: <ul style="list-style-type: none"> <li>• Urban</li> <li>• Suburban</li> <li>• Town</li> <li>• Rural</li> </ul>				
District Technology Leader Name	If yes, enter the information				
District Technology Leader Email	If yes, enter the information				
District Technology Leader Phone	If yes, enter the information				
<b>Technical Information</b>					
District ISPs*	Name of ISP: dropdown list: <ul style="list-style-type: none"> <li>• AT&amp;T</li> <li>• BCN</li> <li>• Bergen TECH</li> <li>• Broadview</li> <li>• Cablevision</li> <li>• Century Link</li> <li>• Cogent</li> <li>• Comcast</li> <li>• Cooperative Communications</li> <li>• Data Network Solutions</li> <li>• Earthlink/One Communications</li> <li>• Fiber Tech</li> </ul>	Enter the type of transport: dropdown list: <ul style="list-style-type: none"> <li>• Asymmetric xDSL</li> <li>• Symmetric xDSL</li> <li>• Other Copper Wireline (other than xDSL)</li> <li>• Cable Modem – Other</li> <li>• Optical Carrier/Fiber to the End User</li> <li>• PSDN (Public Switch Data</li> </ul>	Download Speed (Mbps)*	Upload Speed (Mbps)*	Satisfaction 1(Low) – 6(High)

	<ul style="list-style-type: none"> <li>• Global Telecomm Inc.</li> <li>• IPNETZONE</li> <li>• Level 3 Communications</li> <li>• Lighttower Fiber Networks</li> <li>• LightPath</li> <li>• Line Systems</li> <li>• LSI – Line Systems, Inc.</li> <li>• Mettel</li> <li>• Monmouth Telecom</li> <li>• Net Access Corp. (Nac.net)</li> <li>• Netcarrier</li> <li>• NJDEGE</li> <li>• Optimum Lightpath</li> <li>• Paetec</li> <li>• Pen Tele Data</li> <li>• PTD</li> <li>• Rutgers University</li> <li>• Tellurain</li> <li>• Time Warner</li> <li>• Verizon</li> <li>• Warwick Valley Telephone</li> <li>• Windstream</li> <li>• XO Communications</li> <li>• Xtel Communications, Inc.</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>Network)</li> <li>• Electric Power Line</li> <li>• Other</li> <li>• Don't Know</li> </ul>			
Total District Internet Connection Speed (Mbps) numeric only!	This number should represent the total download speeds from your ISPs				
Internet Utilization*	Indicate the percentage of your Internet bandwidth that is used for normal, everyday traffic. (Typically that number is greater than 0 and less than 100; do not enter the percent sign.)				
Internet Bandwidth Adequate? (Check box)	Check if Internet bandwidth is currently adequate				
District as ISP*	Dropdown list: <ul style="list-style-type: none"> <li>• District serves as the ISP for all of its schools</li> <li>• District serves as the ISP for only some of its schools</li> <li>• District does not serve as the ISP for any of its schools</li> </ul>				

Method of Allocation*	<p>Dropdown list:</p> <ul style="list-style-type: none"> <li>• Bandwidth shaping is used to allocate the same amount of Internet bandwidth to each school</li> <li>• Bandwidth shaping is used to allocate different amounts of Internet bandwidth to each school</li> <li>• Bandwidth shaping is used to allocate variable amounts of Internet bandwidth on demand to each school</li> <li>• Bandwidth shaping is not used. Allocation is first come first serve at each school</li> </ul>
WAN Transport For Schools*	<p>Dropdown list</p> <ul style="list-style-type: none"> <li>• Copper Media</li> <li>• Fiber Optic Media</li> <li>• Wireless</li> <li>• No WAN</li> <li>• Other (specify in comments)</li> </ul>
WAN Transport Used by All Schools*	<p>Dropdown list</p> <ul style="list-style-type: none"> <li>• Yes, All Schools</li> <li>• No, Not All Schools</li> </ul>
WAN Transport Comments	Include any comments if media is not in the list or other related info.
Level of satisfaction with WAN transport*	1=Low, 6=High
WAN Type	<p>If you checked Yes, select the item that best describes your WAN from the drop down list:</p> <ul style="list-style-type: none"> <li>• Circuit Switching</li> <li>• Leased Line</li> <li>• Packet Switching</li> <li>• Cell Relay</li> <li>• Wireless WAN</li> <li>• PSTN (Public Switch Telephone Network)</li> <li>• PSDN (Public Switch Data Network)</li> <li>• Private Network</li> <li>• Other</li> <li>• Don't Know</li> </ul>
<b>Submissions and Updates</b>	View Only
Comments	Anything else that the district thinks is important regarding their network or devices.
Updated By	
Updated At	
Submitted By	
Submitted At	
Prior Submitted by	
Prior Submitted At	
<b>Calculated</b>	View Only
Total Schools	Total number of schools in the district (includes active and in active.)
School Testing Sites	Number of schools in the district that will serve as testing sites.

*NJTRAx Quick Start Guide*

This district has schools with DLM enrollment (Checkbox)	These ratings don't reflect DLM students.
District Tech Readiness	
District Network Readiness	
District Device Readiness	

**School Field Definitions**

**Note: \* are required fields**

School Data Definitions	Table 2
Field Name	Description
District*	
School Code*	
School Type*	Dropdown list: <ul style="list-style-type: none"> <li>• Public</li> <li>• Charter</li> <li>• Private</li> <li>• Other</li> </ul>
School Name*	The District Name is used in various reports. Changes to this field require Administrative Login Access
Address	
City	
State	
Zip Code	
Phone Number	
Fax Number	
<b>Assessment Specifications</b>	
Is Tested (Checkbox)	Check this box if this school has grades that will participate in Statewide Assessment.
Testing sessions will consistently involve less than 20 students (Checkbox)	
Testing Type*	Dropdown list: <ul style="list-style-type: none"> <li>• State testing only</li> <li>• DLM testing only</li> <li>• DLM and State testing</li> </ul>
Assessment Sittings Per Grades 3-5 Student	
Assessment Sittings Per Grades 6-11 Student	
Assessment Window (Days)*	The assessment window is set at 30 days per Statewide Assessment guidelines.
Assessment Sessions Per Day*	The number of assessment sessions per day is set at 2 per Statewide Assessment guidelines
<b>Technical Information</b>	
Internet Speed (Mbps)*	What is your contracted Internet speed in Mbps?
Internet Utilization*	Indicate the percentage of your Internet bandwidth that is used for normal, everyday traffic. (Typically that number is greater than 0 and less than 100; do not enter the percent sign.)
Non-district ISP (Checkbox)	Do you receive Internet from a source other than the district WAN?
Two schools in the same building (Checkbox)	Check the box above if your school shares networking and Internet bandwidth with another school located in the same building
Uses caching servers? (Checkbox)	Are caching servers used to reduce Internet traffic during the assessment sessions?
WAN Connection (Checkbox)	Check if the school is directly connected to a Wide Area Network (WAN).
WAN Speed (Mbps)	Enter the speed of the Wide Area Network in Mbps

School Data Definitions	Table 2
Field Name	Description
WAN Source	Where is the headend of your WAN? District? Other?
WAN Transport*	<p>Dropdown list:</p> <ul style="list-style-type: none"> <li>• Cooper Media</li> <li>• Fiber Optic Media</li> <li>• Wireless</li> <li>• No WAN</li> <li>• Other (specify in comments)</li> </ul>
WAN Transport Comments	
<b>School Access</b>	
Is your wifi network schoolwide? (Check box)	<p>Yes/No</p> <p>Note: Your answer to this question is important, it will determine how your Network Readiness for Testing will be calculated. If Yes, a schoolwide model will be used. If No, calculations will continue to be based on your testing locations.</p>
Grade Levels with 1:1 Ratio?*	Which grade levels have 1:1 ratio of students-to-devices? Check all that apply.
Support BYOD or Guest Network (Check box)	Yes/No Does the school support a Bring Your Own Device model or have a guest network?
BYOD devices estimate	<Numeric> If yes, please estimate the number of BYOD devices (and phones) on the network daily.
Percent of Teachers w/School Devices for 2/47 Use	<Numeric> What percentage of teachers in your school have school-provisioned devices available 24/7 for their use?
<b>Home Access</b>	
<b>The following 4 questions are about Home Internet Access. Please estimate the number of students attending your school whose families access the Internet in the following ways.</b>	
Number of Students: Internet Subscription	<Numeric> Number of students with home Internet service (cable, fiber, etc.), do not include cell service.
Number Students: Hotspot	<Numeric> Number of students with a school-provisioned hotspot.
Number Students: No Connection	<Numeric> Number of students with no connection from home.
Number Students: Other Types of Access	<Numeric> Number of students with: Other (specify).
Describe Other	Other (specify)
<b>Updates and Submission</b>	
Updated By	
Updated At	
Submitted By	
Submitted At	
Prior Submitted By	
Prior Submitted At	
<b>Calculated</b>	
Total Enrollment	Number of students enrolled in all grades in the school
Assessment Enrollment	Number of students who will be assessed in Statewide Assessment
Total Assessment Sitzings Required	The testing enrollment multiplied by 5, the number of test sittings per student.
Total Assessment Sitzings Required (Elementary grades)	

School Data Definitions	Table 2
Field Name	Description
Total Assessment Sitzings Required (Secondary grades)	
Total Assessment Sessions Available	
Number of days Needed in Assessment Window	Given the number of students that must be tested, the number of test sittings needed, the number of ready devices and the number of available testing sessions per day, what is the minimum number of days that would be required in the testing window?
Tech Readiness	Score from 1 to 9 from table that contains a score value for each combination of a device and network score.
Device Readiness	Score from 1 to 9 based on the percentage of ready devices needed that are available.
Network Readiness	Score of 1 to 9 based on the availability of sufficient Internet bandwidth for the number of devices needed and sufficient Wireless Access Points at each testing location.
Minimum Devices Needed	The number of testing devices needed to accommodate the number of test sittings required within the 20-day window. Minimum is set at 20
Total Devices	Total number of devices in the school device file.
Total Ready Devices	Total number of devices in the school device file that meet minimum Statewide Assessment specifications for testing, whether designated for testing or not.
Total Ready Assessment Devices	The number of devices in the school device file designated for testing that meets all criteria for test readiness.
Total Assessment Devices	A count of all devices, ready or not, that have been entered in this school's device file and are designated for testing.
Total Ready Assessment Devices Wireless	A count of all devices in the school device file that are wireless, ready, and designated for testing.
Sufficient Devices (Checkbox)	If checked, there is a sufficient number of devices designated for testing that meet all readiness criteria.
Available Internet Bandwidth (Mbps)	The amount of Internet bandwidth that is available during peak instructional periods beyond typical use. This is calculated by starting with the school's total bandwidth, subtracting 20% to ensure network efficiency, and then subtracting the percentage of that number that represents current level of use.
School Internet Requirements (Mbps)	Internet bandwidth required beyond normal use to meet the needs of simultaneous test takers.
Bandwidth Available Per Simultaneous Tester (Kbps)	Internet bandwidth beyond normal use that is available for each simultaneous test taker.
Total Assessment Sitzings Available	
Upgradeable Assessment Devices	The number of devices entered in the school device file that, while currently marked as Not Ready, could be upgraded to Ready status.
Locations	Number of room locations in the school that will be used for assessment sessions.
WAP Ready Locations	Number of locations that are WAP ready or N/A if there are no sufficient testing devices connected via wireless
WAP Ready?	If Yes, there are a sufficient number of Wireless Access Points to service the devices in all testing locations. THIS MUST BE "YES" OR "N/A" TO BE CONSIDERED "NETWORK READY."
OS Upgradeable Devices	Number of devices in the school device records that could move to Ready status by upgrading OS status.
Resolution Upgradeable Devices	Number of devices in the school device records that could moved to Ready status by increasing the resolution.

School Data Definitions	Table 2
Field Name	Description
TA Tech	Category of Need for Technical Assistance based on Technology Readiness.0=Missing or out of range data; 1=Not Ready (1-3); 2=Not Ready (4-6); 3=Ready (7-9)
TA Device	Category of Need for Technical Assistance based on Device Readiness.0=Missing or out of range data; 1=Not Ready (1-3); 2=Not Ready (4-6); 3=Ready (7-9)
TA Network	Category of Need for Technical Assistance based on Network Readiness.0=Missing or out of range data; 1=Not Ready (1-3); 2=Not Ready (4-6); 3=Ready (7-9)
Inactive	This indicates whether or not the school services test eligible students. If checked, the school is inactive.

**Enrollment Field Definitions**

**Note: \* are required fields**

Enrollment Data Definitions	Table 3
Field Name	Description
School *	Select the school for this grade level.
Grade (0-12) *	0 - 12
Enrollment *	Number of students in this grade
Is Tested? (Checkbox)	If checked, these students will be tested through Statewide Assessment
One-to-One (Checkbox)	Check if there a 1:1 ratio of students to computers in this grade.
BYOD (Checkbox)	Check if there is a Bring Your Own Device (BYOD) program at this grade level.

**Room Field Definitions**

**Note: \* are required fields**

Room Data Definitions	Table 4
Field Name	Description
School *	
Name *	Enter a name that accurately describes this testing location (i.e., Room 106, Library, Mobile Cart #1, etc.)
Available WAPs*	How many wireless access points are available at this location? Be sure not to count the same access points at multiple locations.
WAP Capacity *	The maximum number of wireless devices that can be supported by each Wireless Access Point at this location. Defaults to 30.
Testing Sessions per Day	Periods per day location is available for testing
Potential Device Capacity	What is the maximum number of devices that might be assigned to this location for testing?
Assessment Environment*	School Room Suitable for Testing? Dropdown list: <ul style="list-style-type: none"> <li>• Appropriate = Current environment appropriate for assessment</li> <li>• Adaptable = Moveable to environment appropriate for assessment</li> <li>• Inappropriate = Current environment NOT appropriate for assessment and, NOT sufficiently mobile to move to one</li> </ul>
<b>Calculated</b>	
Ready Testing Devices (via Wireless)	
Is WAP Sufficient?	
Ready Testing Devices (Wired)	
Testing Devices Not Ready	

**Room Field Definitions**

**Note: \* are required fields**

Device List Definitions	Table 5
Field Name	Description
Name*	Brand and Model, e.g., Dell Latitude 620
School Room*	
<b>Technical Information</b>	
Number*	Number of devices of this type at this location
Devices assigned to teachers/admins? *	How many of these devices are assigned to a teacher or administrator?
Used for Testing? (Checkbox)	Is this device or group of devices used for testing?
Used for Digital Learning? (Checkbox)	Is this device or group of devices used for digital learning?
Used for remote learning?	Is the device used for remote learning/instruction (i.e., used in homes)?
Type*	Dropdown list: <ul style="list-style-type: none"> <li>• Chromebook</li> <li>• Desktop</li> <li>• Laptop</li> <li>• Netbook</li> <li>• Other</li> <li>• Tablet</li> </ul>
Operating System*	Dropdown list: <ul style="list-style-type: none"> <li>• Android 5.0 Lollipop</li> <li>• Android 7.0 Nougat+</li> <li>• Android Other</li> <li>• Chrome OS: does not meet specs</li> <li>• Chrome OS: meets tech specs</li> <li>• iOS 11.x</li> <li>• iOS 12.x</li> <li>• iOS Other</li> <li>• Linux Fedora 24 (64 bit)</li> <li>• Linux Other</li> <li>• Linux Ubuntu 16.04 (64 bit)</li> <li>• Linux Ubuntu 18.04 (64 bit)</li> <li>• Linux Ubuntu v9-12</li> <li>• Mac OS X 10.11</li> <li>• Mac OS X 10.12</li> <li>• Mac OS X 10.13</li> <li>• Mac OS X 10.14</li> <li>• Mac OS X 10.15</li> <li>• Mac OS X 11.0</li> <li>• Mac Other</li> <li>• OS not listed: district verified</li> </ul>

	<ul style="list-style-type: none"><li>• Other OS/Unknown</li><li>• Windows 10</li><li>• Windows 7</li><li>• Windows 8</li><li>• Windows 8.1</li><li>• Windows Other</li><li>• Windows Server 2008</li></ul>
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<p>Manufacturer</p>	<p>Dropdown list:</p> <ul style="list-style-type: none"> <li>• Acer, Inc.</li> <li>• Amazon</li> <li>• Android</li> <li>• Apple, Inc.</li> <li>• Asus Tech Computer, Inc.</li> <li>• Dell Technologies</li> <li>• Gateway, Inc.</li> <li>• Google</li> <li>• HP, Inc.</li> <li>• Inspiron</li> <li>• Lenovo</li> <li>• LG</li> <li>• Panasonic Corporation</li> <li>• RCA</li> <li>• Samsung Group</li> <li>• Toshiba Corporation</li> </ul>
<p>Memory*</p>	<p>Dropdown list:</p> <ul style="list-style-type: none"> <li>• &lt; 128MB</li> <li>• &gt;8GB</li> <li>• 1GB (Linux only)</li> <li>• 128MB</li> <li>• 1GB</li> <li>• 1GB (iPad only)</li> <li>• 256MB</li> <li>• 2GB</li> <li>• 2GB (iPad only)</li> <li>• 2GB (Linux only)</li> <li>• 3GB</li> <li>• 4GB</li> <li>• 512MB Non-Mac</li> <li>• 512MB-All Mac desk&amp;laptop</li> <li>• 5GB</li> <li>• 6GB</li> <li>• 7GB</li> <li>• 8GB</li> <li>• iPad memory</li> <li>• Unknown</li> </ul>
<p>Product (level of satisfaction)*</p>	<p>Rate on a scale of 1-6 where 1=Low, 6=High</p>
<p>Product support (level of satisfaction)*</p>	<p>Rate on a scale of 1-6 where 1=Low, 6=High</p>
<p>Cost of device?*</p>	<p>What is the cost of each device?</p>
<p>Cost of device deployment?*</p>	<p>What is the cost of the deployment per device (e.g., insurance, administrative configuration, core software, carrying case, peripherals such as keyboards or headphones, etc.)</p>
<p>Primary Funding Source*</p>	<p>Dropdown list:</p> <ul style="list-style-type: none"> <li>• ESSA</li> <li>• CARES</li> <li>• GEER</li> <li>• IDEA</li> </ul>

	<ul style="list-style-type: none"> <li>• Local</li> </ul>
Secondary Funding Source	Dropdown list: <ul style="list-style-type: none"> <li>• ESSA</li> <li>• CARES</li> <li>• GEER</li> <li>• IDEA</li> <li>• Local</li> </ul>
<b>Calculated</b>	
Device(s) Ready? (Checkbox)	Does this device or cluster of devices meet NJ standards?
Upgradeable? (Checkbox)	Could this machine be upgradeable to NJ Standards?
OS Ready? (Checkbox)	Is the operating system advanced enough?
Memory Ready? (Checkbox)	Is there sufficient memory to support testing?
Create At	Date
Updated At	Date

## 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 Statewide Assessment recommendations, the testing window days are hard-coded to 30, 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 three times. For the Mathematics PBA, two 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: Clustering Devices

Another “ease of use” function that has been added to NJTRAx is the clustering feature. NJTRAx is 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

<input type="checkbox"/>	Name	Count	District	School	School Room	Type
<input checked="" type="checkbox"/>	Chromebook	30	Anywhere Anytime School District	Anywhere Elementary School	Anywhere Elementary School - Chrome Laptop Cart #1	Netbook
<input checked="" type="checkbox"/>	Chromebook	30	Anywhere Anytime School District	Anywhere Elementary School	Anywhere Elementary School - Chrome Laptop Cart #1	Netbook

4. At the bottom of the device list, click the “Cluster” button.

All Devices

5. You will be asked to confirm.

**Confirm device clustering**

**After clustering you will be taken to the new device record where you can edit it**

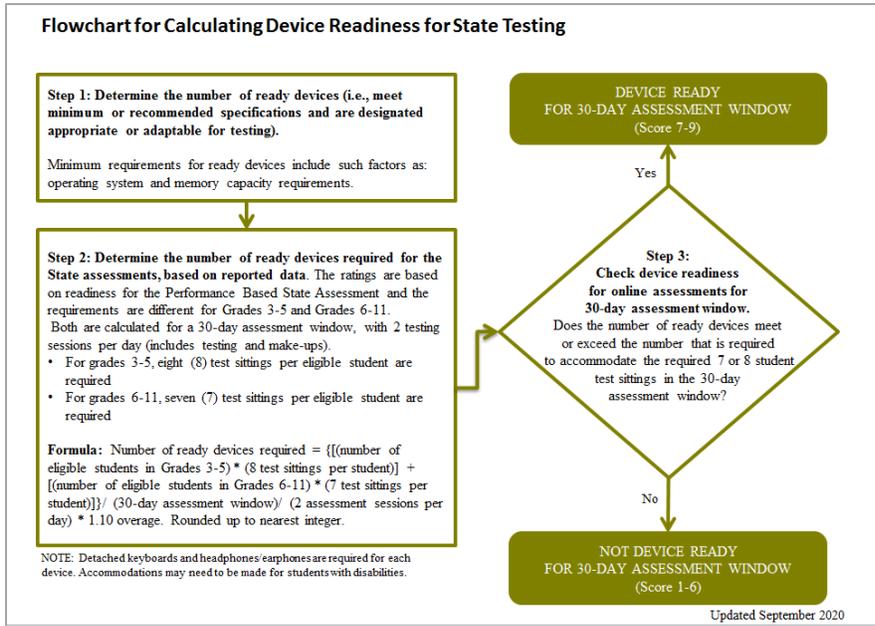
Are you sure you want to cluster the 2 devices?

or

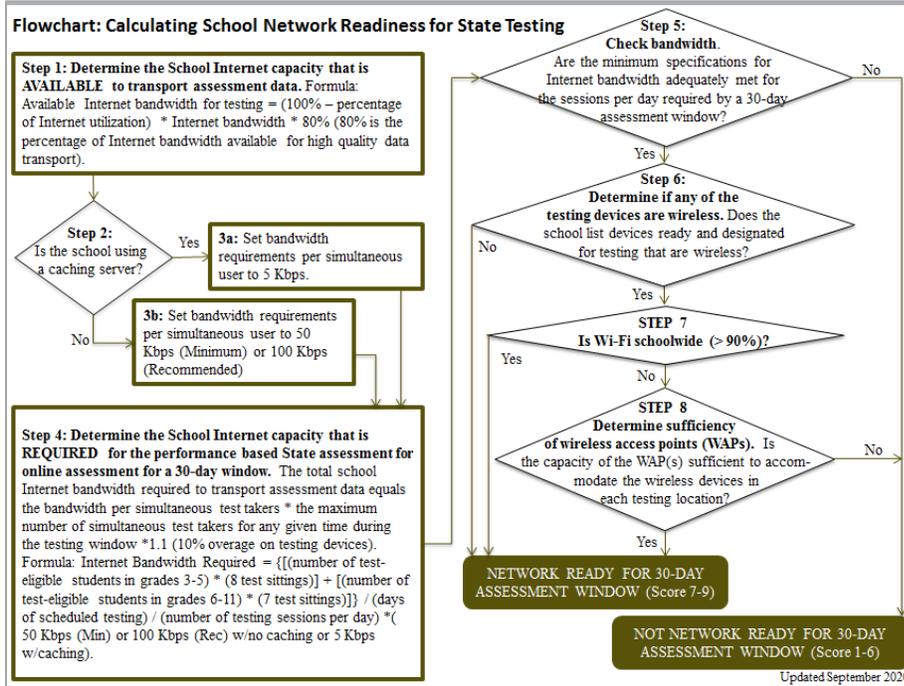
After the clustering is complete, you will be taken to the new record for any edits. The individual records that have been clustered are deleted.

## Appendix F: Flowcharts and Calculation Examples

### Flowchart for calculating device readiness



### Flowchart for school network readiness



## Appendix G: User Roles

### What are the different user roles in NJTRAx?

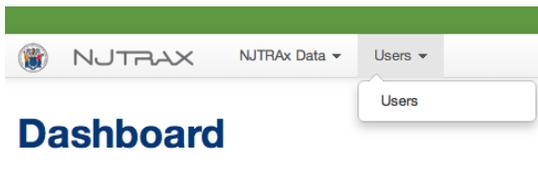
Users can be created and associated with organizations at two levels of NJTRAx, District and School. In this hierarchy, assigning a user to an organization at any level automatically gives them access to the level or levels below. For example, creating a user and assigning them as a District level user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

There are eight types of users that might be assigned.

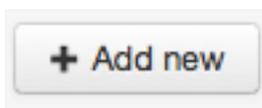
1. State User
2. State Read/Write
3. State Master User
4. Digital Learning User
5. Online Assessment User
6. Read only users – Read only users, as the name implies, can see the data in NJTRAx for the schools and districts to which they are assigned but cannot add to or edit those data. This user type 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.
7. 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.
8. 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.

Associations

Is Master User?

Districts \*

Schools \*

\* Those items with asterisk are required fields

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 user’s 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.

Associations

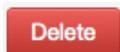
Is Master User?

Delete	District
<input type="checkbox"/>	Anywhere Anytime School District <input type="button" value="List"/>

+ Add new

Schools \*

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.



## **Appendix I: Export/Import Guide**

See Import/Export Guide on the Data Editor Page, Device row.