New York State
Student Information Repository System

New York State Student Identification System

(NYSSIS)

USERS GUIDE

**Version 6.2 Released November 2009**

Introduction

The New York State Student Identification System (**NYSSIS)** is a key element of New York State Student Information Repository System (SIRS). The New York State Education Department (NYSED) developed NYSSIS to assign a stable, unique student identifier to every pre-kindergarten through grade 12 student in New York State. Unique identifiers enhance student data reporting, improve data quality and ensure that important educational records are associated with the correct students as they transfer between local educational agencies (LEAs). In SIRS, each student record is uniquely identified with a 10-digit number assigned when the student first enters a State public school or participating nonpublic school. The SIRS Level 3 Repository will contain an encrypted version of this identifier on each student record.

The purpose of the SIRS is to provide a single source of standardized individual student records for analysis at the local, regional, and State levels to improve student performance and to meet State and federal accountability requirements. This document provides an overview of SIRS, contains definitions of the data elements and templates for the data sets to be collected and is intended to assist vendors of information systems, as well as individual LEAs, in creating data files for submission to the SIRS.

Levels of the SIRS

NYS Student Information Repository System
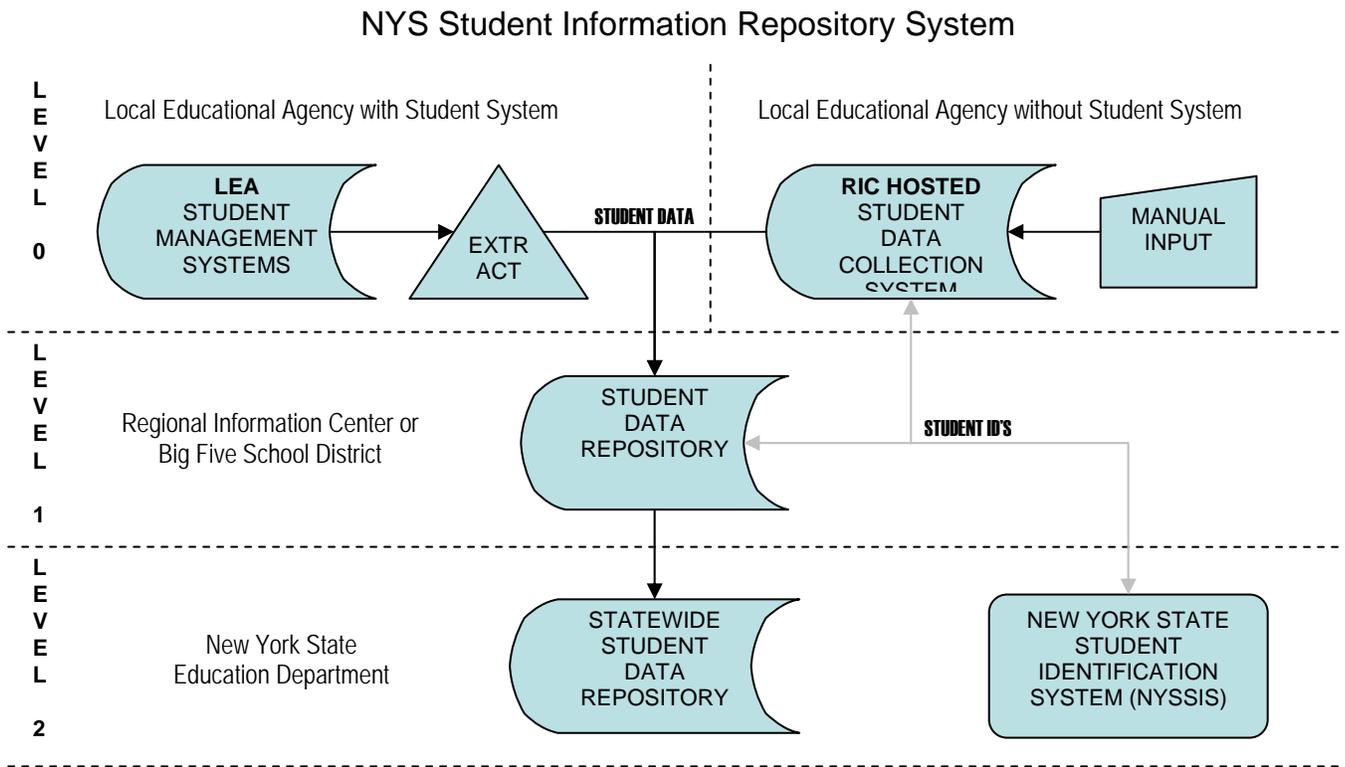
There are multiple data collection points within SIRS. The first point is the local student management systems used by the State's LEAs. The student demographic, school enrollment and program data are typically collected in these local systems. LEAs may also use other systems to collect data about students with disabilities and other program related data. These ancillary systems can be the primary source for this data, such as student disability and free and reduced lunch. Test scoring units within Regional Information Centers (RIC) or the Big 5 School Districts also provide data related to assessments. LEAs that don't have a student management system begin their entry into SIRS at "Level 0".

Level 0 is a web-based application hosted by the RICs. This application provides LEAs the ability to collect and verify their data. Data can be imported or entered directly into this system. This level's primary function is to provide LEAs that don't have a student management system a place to enter their data. It can also be used to collect additional data that may not be available in a student management system. Verified data can be exported from Level 0 in a format that can be loaded directly into the Level 1 repository.

SIRS repository levels 1, 2 and 3, each use the eScholar® data warehouse system and data model, which hold enrollment, demographic, programmatic, and performance data. The primary data source for these repositories is the local student management systems in LEAs.

Level 1 repositories are implemented and operated by a RIC or a Big 5 School District. All charter schools and school districts except the Big 5 must participate in a Level 1 repository operated by a RIC. Each Level 1 repository includes, at a minimum, all the data elements defined in the *Dictionary of Reporting Data Elements*. This Dictionary can be found at: http://www.emsc.nysed.gov/irts/sirs/ Data is loaded into Level 1 repositories using data templates and load procedures provided within the eScholar® application. Users of the Level 1 repositories may include additional data elements to meet local or regional needs. The data collected at this level is used for local data analysis and reporting and State reporting, as well as pre-printing answer sheets for scanning services. In addition, the demographic data elements are used in NYSSIS to create unique student IDs, which are stored and maintained at this level. Finally, the Level 1 repositories will be used by LEAs to prepare data for submission to the Level 2 repository. Data in the Level 1 repository will be available only to users with a legitimate educational interest.

The Level 2 repository is a single statewide data warehouse, where all K-12 school data from Level 1 is aggregated. Level 2 provides for statewide data analysis and reporting. This level holds records for all students and provides educators and policy makers with a resource for data-driven decisions to improve curriculum and instruction. Level 2 records include student names and unique identifiers, assigned by the NYSSIS. Data in the Level 2 repository will be available only to users with a legitimate educational interest.

The Level 3 repository is the NYSED data warehouse. This is a single warehouse used by NYSED to meet State and federal reporting requirements. This level will replicate the student records on the Level 2 repository. However, as records are transferred to Level 3, student names will be removed and the unique identifiers will be encrypted to protect the privacy of students. Level 3 will provide data for the New York State School Report Card, for determining the accountability status of public schools and districts, to meet federal reporting requirements, to inform policy decisions, and to meet other State needs for individual student data. Standard aggregations of data from the Level 3 repository will be placed in the Annual Reporting Database to provide the general public with access to school performance data.

Data in SIRS is accessed through a Statewide reporting service - the New York Statewide Testing and Accountability Reporting Tool (nySTART). nySTART can be found at: http://www.emsc.nysed.gov/irts/nystart/home.html This is a web-based data reporting service that provides LEAs and other personnel with a baseline group of reports and analyses about students as well as a series of reports that are used to verify and certify the completeness and accuracy of data in the Level 1 and Level 2 repositories.
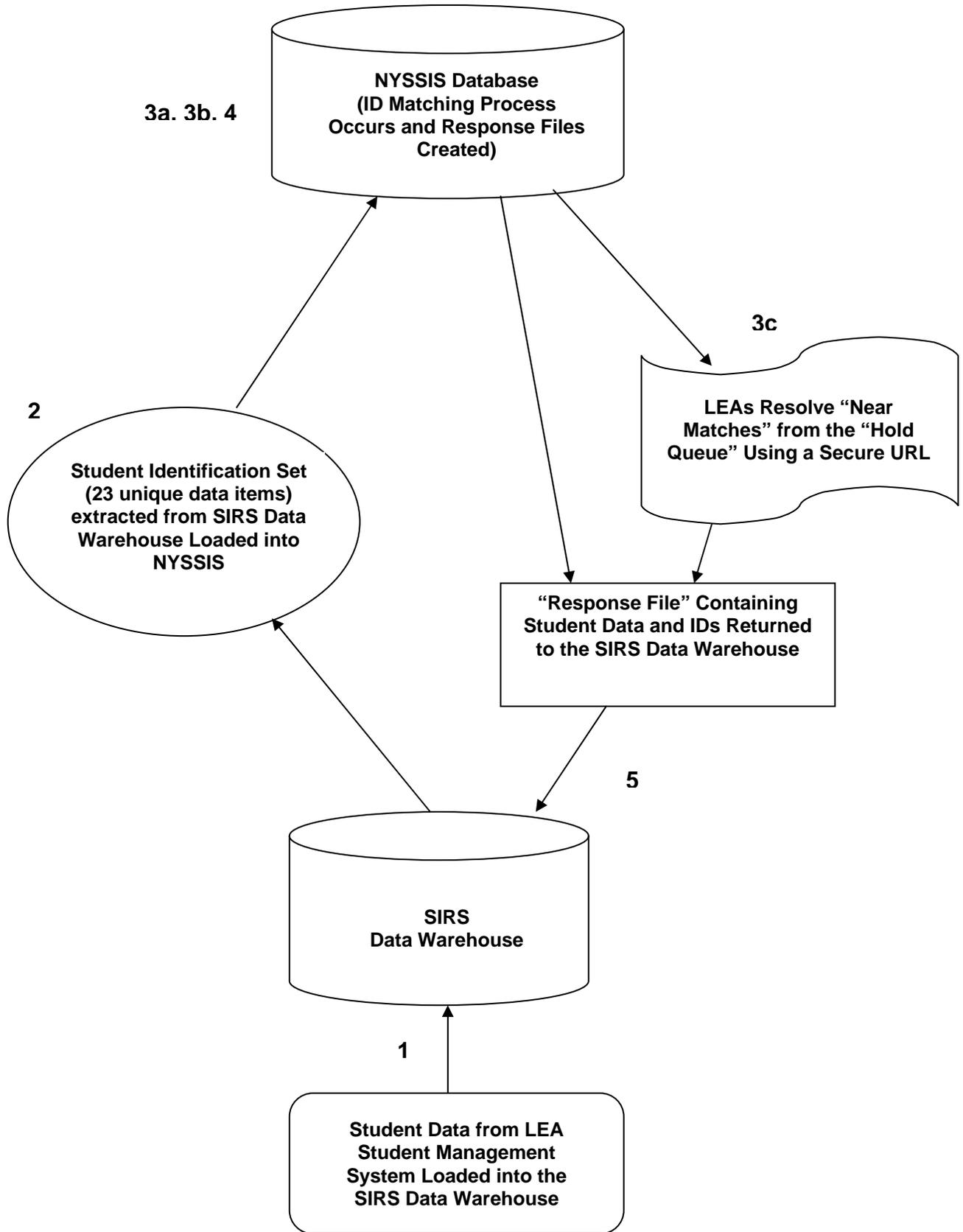
Contents

What NYSSIS Is:

The New York State Student Identification System (NYSSIS) is an electronic information system that assigns a Unique Statewide Identifier (ID) to students in New York State public schools, including charter schools. NYSSIS enables these local educational agencies (LEAs) to obtain new IDs for students who do not have an existing one and to retrieve IDs that have been previously assigned to students. The ID assigned by NYSSIS will be used by LEAs to report student-level data to the Student Information Repository System (SIRS). The ID can also be used by LEAs to obtain information from or provide information to other LEAs when a student transfers into or out of an LEA.

How NYSSIS Works:

1. **Student Data Loaded into the SIRS Data Warehouse:** Regional Information Center (RIC) and Big 5 City District technical personnel load student demographic data from an LEA's student management system into the SIRS data warehouse.

2. **Student Identification Set Loaded into NYSSIS:** RICs/Big 5 extract a particular set of 23 of these student data items, referred to as the "Student Identification" set from the SIRS data warehouse and load them into the NYSSIS database. These processes are done using a File Transfer Protocol (FTP), which ensures that the data transfer is secure and confidential.

3. **NYSSIS ID Matching Process Occurs:** NYSSIS checks the database to determine whether the Student Identification set matches any records already in the database.

   a. If no match is found, an ID is created and added to the end of the student information data record.

   b. If a match is found, the ID already assigned to the student is added to the end of the student information data record.

   c. In some cases, it is not possible to determine if the data submitted matches an existing record in the database. These cases are called "Near Matches." In these cases, NYSSIS places the data in a "Hold Queue" and staff members from the LEA must log on to NYSSIS and determine if the data matches a student previously assigned an ID or if the data represents a student who requires a new ID.

4. **Response Files Created:** NYSSIS creates "Response Files," which are files that contain student data plus the student's ID.

5. **Response Files Placed into SIRS Data Warehouse:** RICS/Big 5 retrieve the response files and place them in the SIRS data warehouse, again using a secure and confidential FTP transfer process.

How NYSSIS Works

NYSSIS Database (ID Matching Process Occurs and Response Files Created)

3a. 3b. 4

2

Student Identification Set (23 unique data items) extracted from SIRS Data Warehouse Loaded into NYSSIS

3c

LEAs Resolve "Near Matches" from the "Hold Queue" Using a Secure URL

"Response File" Containing Student Data and IDs Returned to the SIRS Data Warehouse

5

SIRS Data Warehouse

1

Student Data from LEA Student Management System Loaded into the SIRS Data Warehouse

Obtaining a Student ID Using NYSSIS

Student Data Loaded into the SIRS Data Warehouse:

LEA personnel should contact their individual RIC/Big 5 to obtain guidance on the format and structure they require data to be in so that they can submit these data to the SIRS data warehouse, as each RIC/Big 5 may have different requirements.

Student Identification Set from the SIRS Data Warehouse Loaded into NYSSIS:

The Student Identification set is a set of 23 data items that enable NYSSIS to identify a student uniquely. **Of these 23 data items, the <u>School District Student ID</u>, the <u>Student's First Name</u>, the <u>Student's Last Name</u> and the <u>Student's Date of Birth</u> are *required* for processing an ID in NYSSIS. If one or more of these required fields are blank, the record is rejected by NYSSIS. NYSSIS also rejects each student record that has a invalid Basic Educational Data System (BEDS) code for the LEA that is responsible for the student (i.e., the <u>District of Responsibility BEDS Code</u>) or the school building in which the student receives services (i.e., the Building of Enrollment BEDS Code).** The more complete the data set submitted, the greater the likelihood that a correct match with an existing ID or an accurate determination of a new ID will be made. The table on the following page shows the Student Identification set used for NYSSIS.

Student Identification Set (NYSSIS)
** Required fields

NYSSIS File Fields	Size	Format	Description
*District of Responsibility BEDS Code**	*12*		*12-digit BEDS code assigned to the district*
*Building of Enrollment BEDS Code**	*12*		*12-digit BEDS code assigned to the specific building*
*School Year**	*10*	*YYYY-MM-DD*	*Usually YYYY-06-30*
*School District Student ID **	*9*	*nnnnnnnnn*	*Local Identifier assigned by the local student information system for this student. Alternatively, this may be the identifier assigned by the regional warehouse. This will be used to map the NYSSIS statewide ID back to the record in the warehouse or local system.*
*Student's Last Name**	*25*		*Student's Last Name*
*Student's First Name**	*25*		*Student's First Name*
Student's Middle Initial	1		Student's Middle Initial
First Date of Entry into Grade 9	10	YYYY-MM-DD	This is the actual date that the student entered grade 9. Do not project this date, but leave this field blank, for students in grades Pre-K through 8.
*Grade Level**	*4*		*See the SIRS manual and Data validation rules:* http://www.emsc.nysed.gov/irts/sirs/
*Date of Birth**	*10*	*YYYY-MM-DD*	*This is the date of the student's birth, derived from an official source as dictated by district policy.*
*Gender Description**	*6*	*Male, Female*	
Home Language Description	40		See the SIRS manual and Data validation rules: http://www.emsc.nysed.gov/irts/sirs/
*Race/Ethnicity Description**	*40*		
Immunization Date for First Polio Vaccination	10	YYYY-MM-DD	This is the date of the FIRST polio immunization, either IPV or OPV. Use the first day of the month if day is not indicated.
Student's Address Line 1	30		Home Address
Student's Address Line 2	30		If Address Line 2 is populated, Address Line 1 must not be null.
Student's Address City	25		
Student's Address State Code	2		
Student's Address Zip Code	10	XXXXX or XXXXX-XXXX	Zip code can be either 5 digits without a dash or nine digits with a dash
Student's Guardian Name One	40	FirstName LastName	Full name of primary guardian
Student's Guardian Name Two	40	FirstName LastName	Full name of second guardian
Phone at Primary Residence	12	XXX-XXX-XXXX	Phone number at student's primary residence
Student's Place of Birth	50	City State/Province/ Region Country	See the SIRS manual and Data validation rules: http://www.emsc.nysed.gov/irts/sirs/

Student information is loaded into the NYSSIS database via a batch file, which contains information on many students. The batch file then breaks this information down into separate student identification data records.

To illustrate the difference between a batch file and a student record, think of a filing cabinet containing many manila folders. The filing cabinet itself is the batch file. The manila folders in it are the student records.
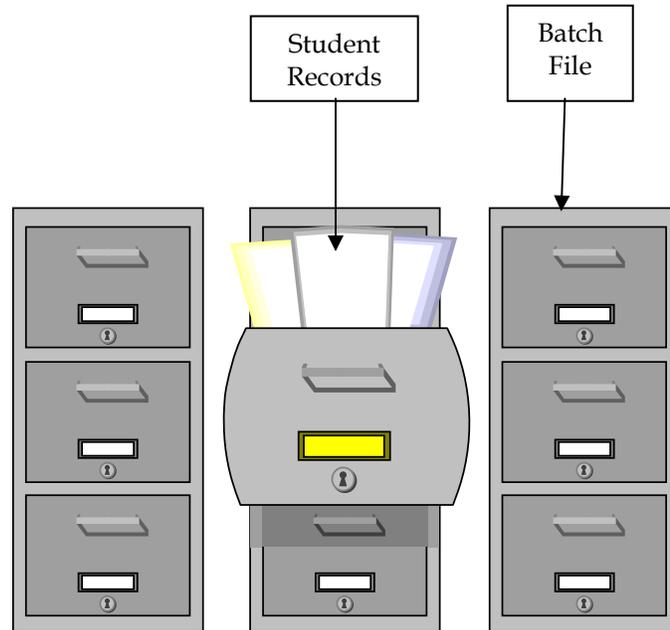

A student identification data record is a collection of data items that identify a student (e.g., Student's First Name, Student's Last Name, Student's Address Line 1, School Year, etc.). The following is a pictorial view of a student information data record:
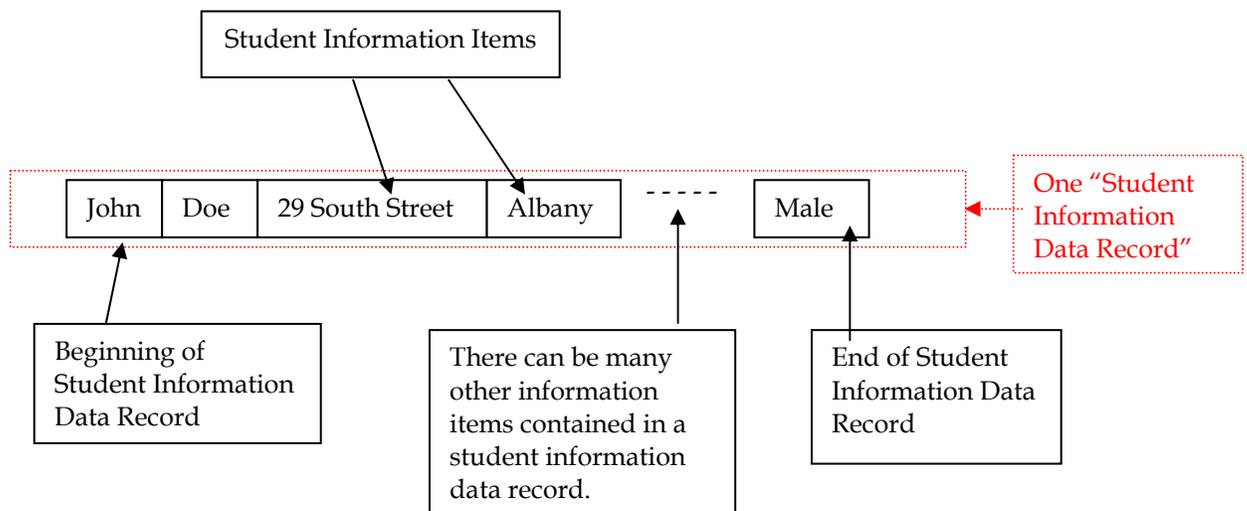
Creating "Response Files":

One or more records with assigned IDs are bundled into a single file called a "Response File". This file is created so that it can be uploaded to the data warehouse.
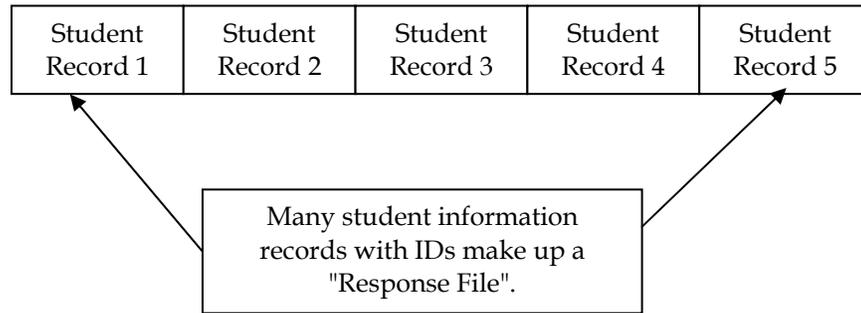
Over the course of time, the same student information record (e.g., Student Record 1 shown above) could be sent to NYSSIS many times. This is especially the case with students who frequently move from school to school or district to district. Student records collected over the years are never deleted from the NYSSIS database. Therefore, there may be more than one student information record associated with a particular ID assigned by the NYSSIS. In other words, there could be one ID in the NYSSIS database that has multiple student information records associated with it.

When a student information record is submitted to NYSSIS and the NYSSIS matching engine determines it matches an existing NYSSIS ID, that existing ID is assigned to the student information record. At the same time the student information record is associated with that existing NYSSIS ID in the database.

This process results in additional data that can be used to match future submissions of a Student Identification data set for the same student. For example, if a student has a change of guardian over time, the NYSSIS system will maintain information on all of the guardians associated with that student. Therefore, if the student returns to a former guardian, NYSSIS will recognize this and be better able to automatically associate the new student data with an existing record in the NYSSIS database.

NYSSIS ID Matching Process:

When a student information data record is loaded into NYSSIS for processing, NYSSIS checks the database to determine whether the Student Identification set matches any records already in the database.

1. If no match is found, an ID is created and added to the end of the record.

2. If a match is found, the ID already assigned to the student is added to the end of the record.
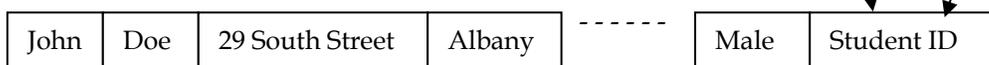
3. If NYSSIS cannot determine if the data submitted matches an existing record in the database, the record (called a" Near Match") is placed in a "Hold Queue."

Resolving Near Matches in the Hold Queue:

A Near Match record is made up of the newly submitted student record and one or more records that are already in the NYSSIS that contain many similar elements but not enough to determine if the records are for the same student. The newly submitted record only nearly matches the records already in the NYSSIS. As such, the newly submitted record is placed in a Hold Queue with the records from the NYSSIS it nearly matches. Authorized LEA personnel must then review and resolve these Near Matches by determining if the student record should be matched with an existing NYSSIS ID or issued a new NYSSIS ID.

When the 'View Candidates' option is selected one of the three scenarios will occur:

1. One or more candidates will be displayed with a percentage indicating the likelihood the two records match. The probability will range anywhere from 45% to 99%.

2. A match candidate will be displayed, but the option to match to the record will not be available. This scenario is a result when the near match candidate does not have a statewide identifier assigned yet because the candidate record is also a 'hold' record. This usually occurs when duplicate data is submitted and/or a specific rule has been established to not match certain kinds of records. These rules are often enforced on twins and siblings where data is very similar, if not exact.

3. No candidates displayed. Occurs when near match candidate is removed from the NYSSIS database or the number of students to compare with has significantly changed since the original hold decision.

LEAs are not permitted to delete student records from NYSSIS once they are added. All Near Matches must be resolved. Data accuracy is paramount to ensuring that LEAs do not create new records in error or match two unique student records in error.

How to Become a NYSSIS User:

NYSSIS is accessible to authorized users only. Users who require access are provided with a NYSSIS Login Account. These accounts are specific to an individual, not generic. Each LEA will have at least one authorized user, who will log into NYSSIS. A Username and Password will be provided to the authorized user for each LEA.

The primary purpose for accessing NYSSIS is to resolve Near Matches. This work may be performed as appropriate by RIC, Big5 and LEA personnel. In addition, certain administrative activities may be performed by RIC and Big5 NYSSIS Authorized Contacts.

The creation of NYSSIS accounts no longer requires that paper authorization be sent to a RIC/RCC. NYSSIS accounts are authorized and created by the Agency Head, so, depending on LEA type:

NYC Public	Contact the Chancellors' Office
Public School Districts outside of NYC:	Contact your School Superintendent
BOCES:	Contact your District Superintendent
Charter Schools	Contact your Principal
Non-Public Schools	Contact your Principal (or Diocesan contact if Applicable)
RIC's/RCC's	Contact your Student ID Contact

Once created, a NYSSIS Login Account will be assigned and a UserID and Password will be emailed to the users. Authorized users can access the Web Interface by logging on to:

http://portal.nysed.gov

NYSSIS Login Page:

NYSSIS now uses **The NYSED Application Business Portal**. Use of the **NYSED Portal** enables users who access other **NYSED** applications to have a single Username and Password for all of those applications.

Placing the URL http://portal.nysed.gov in the address line of the browser takes the user to **The NYSED Application Business Portal**:

At the subsequent screen, enter your Username and Password and click the "OK" button.

Enter User Name and Password and Click either "OK" button.

If the login is successful, you will enter the portal. Click on the NYSSIS link.

Click on the NYSSIS link

If the login is NOT successful:

If Login is unsuccessful due to unauthorized Username/Password or incorrect typing in of Username/Password, the Login Screen will send the following message:
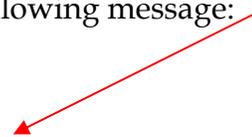
Error: Authentication failed. Please try again.

Sign In

Enter your Single Sign-On user name and password to sign in.

User Name kdsjgkgh

Password •••••••

Your login may fail because you have not typed in your password correctly or because your account is locked.

If you have any problems logging into the Business Portal contact your SEDDAS Delegated Administrator or your Superintendent or Principal.

NYSSIS Home Page:

After clicking on NYS Student Identification System (NYSSIS) you will move to the NYSSIS Home Page:

Links to User Guides

Click here to begin resolving hold queue

Hyperlinks to various NYS web pages (such as "SED Home", "About NYSSIS", "Contact Us", "NYSSIS Home", "FAQ", and "Logout")

NYSSIS "Hold Queue" Access:

To view the list of "Near Matches" for resolution, click on the "Queue" menu item.

Queue Resolution Screen:

The "Queue Resolution" screen lists the student records of an LEA that NYSSIS could not automatically assign an ID to:

User must click on "Queue" item to see the screen shown.

You can sort rows within a page by clicking on the specific column header (e.g., "Date of Birth" or "Student's First Name").

Each row is a student record in the Hold Queue that is pending resolution.

NYSSIS
NEW YORK STATE STUDENT IDENTIFICATION SYSTEM
NYSED.gov

SED Home | About NYSSIS | Contact Us | Logout | NYSSIS Home | FAQ | User Guide | Queue Help

Queue

Queue Resolution List

5 items found, displaying all items.1,2,3,4(Next/Last)

Local ID	First Name	Last Name	Date of Birth	Guardians	Grade	Gender	Actions
000000000	Sally	Sample	2001-11-02	Samuel Sample	2nd	Male	Candidates | Detail
0000	Mars	Small	2000-09-27	Jupiter Bigger	3rd	Male	Candidates | Detail
0000	Example	Smith	2000-01-14	Stephanie Whoever	3rd	Male	Candidates | Detail

If queue listing has multiple pages, these command buttons allow easy movement through the list.

rt options: CSV | Excel

Near Match' Records Ready to Review: 5 (s) during this ses

The "Candidates" hyperlink shows the list of possible matches for the student in the

The "Detail" hyperlink provides detailed information about each student.

"Near Match" Candidates Screen: Scenario #1:

The "View Candidates" hyperlink for a record in the Hold Queue results in a screen where the user can compare the details of the selected student with student records in the NYSSIS database that are "Near Matches":

Once the "Candidates" link is clicked, detailed student information, will be shown.

Queue Near Match Candidates

Name (Last, First Mi):
Sally Sample   A

Date of Birth:
11/02/2001

Address & Phone:
101 Any St.
Anytown, NY 99999
(555) 555-5555

Local ID :
000xx000

School Year & Grade:
06/30/2009 , 2nd

Ethnicity & Language Spoken at Home:
Black or African American - English

Guardians:
Samuel Sample

Place of Birth:
Kingston Jamaica

District Information:
CITY SCHOOL DISTRICT (000000000000)
WOOD SCHOOL (000000000000)

Gender:
Male

Grade Nine Entry:

Date of Vaccination:

Record Submission Date : 01/30/2009 RIC SOUTHERN TIER 039000900000

The **"Compare"** command button generates a screen showing one or more student records associated with this ID row. The record(s) can then be compared with the Hold Queue record for matching purposes.

Below is a list of Students currently with NYSSIS ID's that are near matches for the above Hold Queue Student.

Probability	First Name	Last Name	Birth Date	Gender	Action
94%	Sammy	Sample	11/02/2001	Male	Compare

Existing student records from the NYSSIS database and the probability of a match.

New Student   Return to Queue List

New Student command button – Use if none of the student records listed matches the Hold Queue. This will issue a new NYSSIS ID.

Return to Queue List command button – Use to return to the "Queue Resolution" screen to view all records in the Hold Queue.

"Queue Near Match Candidates" Scenario #2:

The " Candidates" hyperlink for a record in the Hold Queue results in a screen where the user can compare the details of the selected student with student records in the NYSSIS database that are "Near Matches". The student below no longer has a match candidate. The best course of action in this scenario is to push the "New Student" button.

Sometimes, the near match candidate for the Queue record has not been assigned a NYSSIS ID, and the candidate shown is also a "queued" student awaiting an ID. In that scenario, you should select the "New Student" button. This will allow you or the other district to match to the newly generated ID.

Queue Compare to Specific Candidate:

The "Compare" hyperlink on the previous page generates the "Queue Compare to Specific Candidate" screen below. This screen displays the Hold Queue record detail along with records of students that nearly match the record in the Hold Queue. There can be multiple student records that nearly match a student record. In addition, any given record that nearly matches a student in the Hold Queue may have already had other records linked to it. Therefore, selecting a record for comparison may generate multiple records for comparison, all of which have already been determined to relate to a single student.

Detailed information about the student record chosen from the "Queue Resolution" screen.

The difference between the two records is highlighted in Yellow

Details of the first student record associated with the ID chosen for comparison are displayed automatically.

"**Confirm Match**" – links the new student record to an existing student record.
"**Return**" – returns to the previous screen.

Queue Confirm Match:

The "Confirm Match" command button on the previous screen generates the "Queue Confirm Match" screen. At this point, the user can either confirm the match by selecting "Yes" or "Cancel" the match by selecting "Cancel".

Queue Match Complete:

3. The Near Match or Hold Queue resolution process is completed and the "Queue Match Complete" screen is generated when the user selects "Yes" on the "Confirm Match" screen. In the "Queue Match Complete" screen example below, the "Hold Queue" student record is removed from the Hold Queue and assigned the student ID 5851374004 in the NYSSIS database. The "Hold Queue" record has been successfully resolved. This record will be included in the next "Response File". The RIC/Big5 technical personnel will generate and load the response file into the SIRS data warehouse.

Logging Out:

The user may log out of the NYSSIS application by selecting the "Logout" hyperlink on any page in the NYSSIS system.

Logged Out:

When logout is completed, the following screen is generated, indicating the date and time of log out:

Appendix A:

RIC/BIG 5	BEDS Code	Contact Name	Phone	Email Address
Northeastern New York (NERIC)	019000900000	Jeff Baker	518-862-5410	jbaker2@gw.neric.org
		John Warner	518-862-5300	jwarner@gw.neric.org
Central New York (CNYRIC)	429000900000	Mary Brady	315-433-8303	mbrady@cnyric.org
Mohawk RIC	259000900000	John Domagal	315-361-2700	jdomagal@moric.org
Western New York (WNYRIC)	149100900000	Ken Jurek	716-821-7438	kjurek@e1b.org
		Tom Kumiega	716-821-7166	TKumiega@e1b.org
Lower Hudson	669000900000	Mark Samis	914-592-4203	msamis@lhric.org
Eastern Suffolk	589100900000	Laura Barranco	631-244-4282	lbarranc@esboces.org
Schuyler-Chemung	559000910000	Stephen Updike	607-795-5338	supdike@gstboces.org
Monroe 1	269100900000	Daron Lowell	585-349-9064	dlowell@bocesmaars.org
		Gregg Gleba	585-349-9063	ggleba@bocesmaars.org
NYC DOE	300000010000	Oded Strich	718-935-5697	ostrich@schools.nyc.gov
Southern Tier	039000900000	Dwight Linder	607 757-3006	dlinder@btboces.org
Finger Lakes RCC (Edutech)	439000910000	Lisa Roberts	315-332-7413	lroberts@edutech.org
Mid-Hudson	629000910000	Gayle Tamburrini	845-255-1450 x1321	gtamburr@mhric.org
		Lisa Pullaro	845-255-1450 x1246	lpullaro@mhric.org
Nassau	289000900000	Pat Reinhardt	516-832-2737	preinhar@mail.nasboces.org
Syracuse CSD	421800010000	Kelly Carley	315-435-4281	kcarley@scsd.us
Yonkers CSD	662300010000	David Weinberger	914-376-8232	dweinberger@yonkerspublicschools.org

SED Application contacts:

```
Enterprise Help Desk: 800-697-1323
NYSSIS Help Desk     : 518-473-6815
Teach Help Desk      : 518-486-6041
Charlene Swanson     : 518-474-7965
Sue Hammerle         : 518-486-1761
Mary Gardy           : 518-486-2360
Rich Sagendorf       : 518-402-5219
NYSED Fax            : 518-474-2519
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