

# Resolving SSID Matches

#### Introduction

Shortly after enrolling in a California school, a child will be issued a unique identification number, known as a Statewide Student Identifier or SSID. This identification number stays with the child regardless of where they move throughout the State. In the Migrant Student Information Network (MSIN), having each child's SSID number is critical because the system uses it as a "bridge" to match migratory children with their data found in the California Department of Education's (CDE) student database, CALPADS, and assessment files. For instance, the MSIN team creates student lists with SSIDs to request specific data from CDE, such as which students are English learners, have disabilities, or have dropped out of school. Therefore, it is very important to have reliable, validated SSID numbers in the MSIN system.

Technology partners at the CDE have recently provided access to a CALPADS application programing interface (API) that allows MSIN to do basic child searches on CALPADS. With this new tool, MSIN can now obtain and validate SSID numbers using a semi-automated process. If a child's SSID cannot be obtained or validated automatically, the system creates a match task for local Data Specialists to resolve. These new SSID matching features in MSIN are meant to help Data Specialists streamline their work around SSID numbers for their migratory child population.

This guide is intended for MSIN users with the Data Specialist role and for managers who oversee Data Specialists. Readers should have experience working with MSIN child records and be familiar with the terminology covered in other user guides intended for Data Specialists. This guide covers the following topics:

- Overview of SSID matching workflows
- Match types, including automated and manual matches
- How to resolve SSID matches manually
- How to confirm that a child's SSID match was done correctly
- Frequently asked questions
- Additional resources

### Overview of SSID Matching Workflows

#### WORKFLOW TO AUTOMATICALLY VALIDATE EXISTING SSID NUMBERS

Most migratory children in MSIN already have SSID numbers that subgrantees have looked up and entered manually. This system enhancement monitors child records for specific changes, such as name and date of birth (DOB) edits, and then automatically searches and compares MSIN data with the corresponding CALPADS data to confirm that their existing SSID number in MSIN is correct. Changes to the following data elements (made under each child's Demographics tab) will trigger a new search via the CALPADS-API component:

- First name (FN)
- Middle name (MN)
- Last name 1 (LN1)
- Last name 2 (LN2)



- Date of birth (DOB)
- SSID number (SSID)

Note that a new search begins very shortly after editing an MSIN child record. MSIN sends that child's first name, last name, and DOB as search parameters. Once a response is received, the system compares predefined data elements and attempts to complete the match task automatically.

#### WORKFLOW TO AUTOMATICALLY OBTAIN SSIDS FOR NEW CHILDREN

For children who are new to the Migrant Education Program (defined as having a new MSD assigned after Certificate of Eligibility [COE] approval), this enhancement automatically accesses CALPADS data and matches the child to the correct SSID. The CALPADS-API component in MSIN will automatically add the SSID number to the child's statewide record, under the Demographics tab of the child record modal.

#### **WORKFLOW TO MANUALLY RESOLVE SSID MATCHES**

For cases where the automated matching process cannot find a perfect match in CALPADS, this enhancement includes a worklist page and comparison modal so that Data Specialists can see all the CALPADS responses and then choose an option to resolve the match task. This is called a Manual Match. In most instances, Data Specialists will see a CALPADS record that is close enough to confidently resolve the match as the same child or youth. Selecting a CALPADS match will copy the record's SSID into the corresponding SSID field in the MSIN child record.

#### **WORKFLOW FOR NO MATCH SITUATIONS**

In some cases, all the CALPADS records are too different —or there is not enough information— to confidently choose a match. When this happens, Data Specialists should resolve the task as a No Match. This means that the basic child information we have in MSIN (such as the names and DOB) could not be found in CALPADS. We expect this situation to occur for very young children who have not started school in California, so they would not have an SSID yet. This situation may also occur for "here-to-work" Out of School Youths (OSYs), who have never attended school in California and would therefore not have an SSID.

# **Match Types**

All completed match tasks fall under the following groups:

- Automated matches done by the MSIN system (CALPADS-API component)
- Manual Match cases done by MSIN Data Specialists
- No Match cases done by MSIN Data Specialists

To expand on the first bullet, there are four automated match types that MSIN does in the following sequence:

- 1. FN, LN, DOB, SSID (First Name, Last Name, Date of Birth, Statewide Student Identifier)
- 2. **FN, DOB, SSID** (First Name, Date of Birth, Statewide Student Identifier)
- 3. **FN, LN1, LN2, DOB** (First Name, Last Name 1, Last Name 2, Date of Birth)
- 4. FN, MN, DOB, Birth City (First Name, Middle Name, Date of Birth, Birth City)

For each child, the application tries to match these data elements in both systems, MSIN and CALPADS. The child's first name in MSIN is compared with their first name in CALPADS, their last name in MSIN is compared to their last name in CALPADS, their DOB in MSIN is compared to their DOB in CALPADS, and so on. Each data element must



match exactly for the application to consider the automated match a success. As soon as one of the automated matches succeeds, the system will stop and log the match type (one of the four options above).

If all four automated matches cannot find exactly the same set of information in both systems, then the child or youth goes into an "Unresolved" queue, so that local Data Specialists can complete the match task manually.

The next section provides details on the Manual Match and No Match use cases.

### **Resolving SSID Matches Manually**

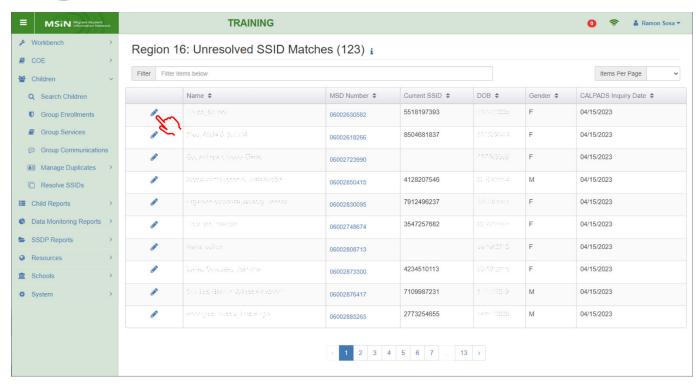
Data Specialists have been resolving MSIN duplicates for many years now. This new process for resolving SSID numbers is similar, except we are comparing data in two different systems to ensure that we identify the same child or youth in both databases.

As with MSIN duplicates, the main summary page is listed under the "Children" menu and it shows both Unresolved and Resolved SSID matches.



The second column, Unresolved, shows how many match tasks need to be completed by local Data Specialists. Click on the count to bring up the worklist. It shows exactly which children and youth need a manual comparison of their information in MSIN and CALPADS.

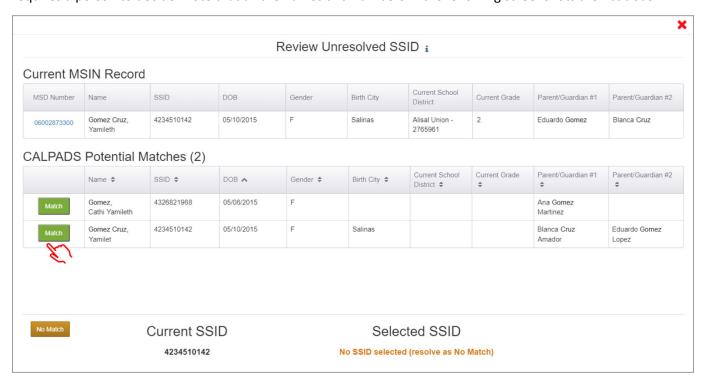




Click on an edit icon to bring up the comparison modal.

#### MANUAL MATCH RESOLUTIONS

The following screenshot is an example of a match task that MSIN did not resolve automatically, so now it requires a person to decide. Note that all the names and numbers in the following screenshots are fictitious.





The first table shows the MSIN child record that we want to match against. The second table, CALPADS Potential Matches, shows children who might match the MSIN record above.

The instructions for manual matches are straightforward:

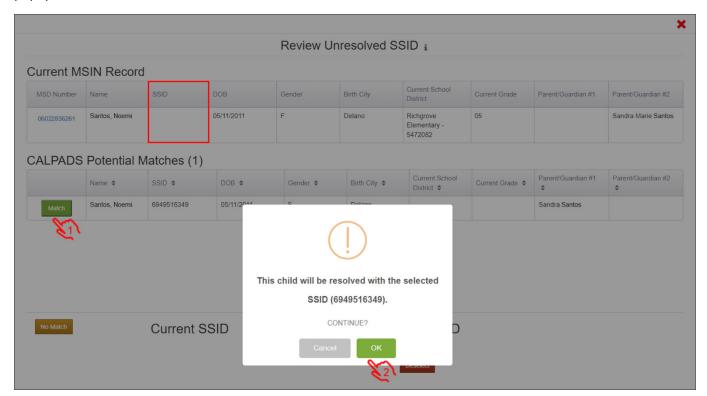
- 1. Compare the MSIN record to <u>all</u> the CALPADS records (the total number of records is shown in brackets).
- 2. If you are very confident that one of the rows in the CALPADS table matches the MSIN record, click the "Match" button to select it.
- 3. Read the popup message before confirming your selection.

In the example above, the second row in the CALPADS table is a very close match, so we would click on the Match button to select it. This will bring up a confirmation popup, as follows:



By clicking "OK" we are validating the current SSID, which is already in MSIN, so that we can confidently use it in the future to obtain the student's assessment data and other indicators. The modal will now close automatically and the match task is completed.

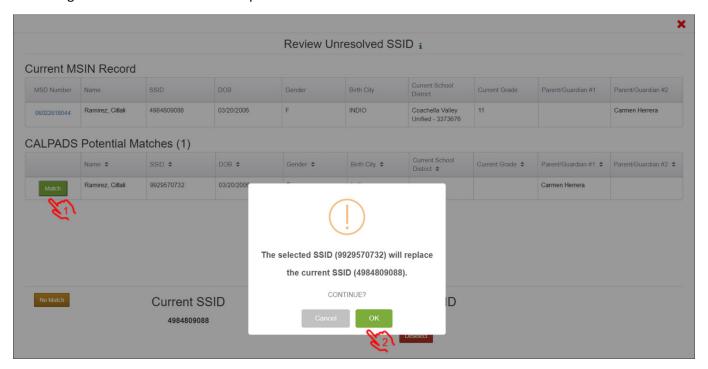
In other cases, the child or youth will not have a current SSID (see blank column below), and the confirmation popup will focus on the new SSID that will be added to the MSIN child record.





After clicking "OK" the new SSID will be copied into the child's Demographics tab in their child record modal. Again, the modal will close automatically, and the match task is completed.

A third scenario is illustrated below. There is a match in the CALPADS Potential Matches table, but the SSID is different in the MSIN record. In this case, selecting the correct, matching row will trigger a confirmation message describing how the selected SSID will replace the erroneous one in MSIN.

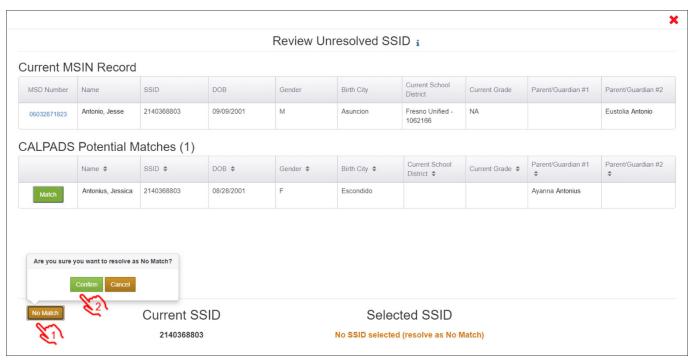


Because CALPADS is the authoritative system for SSID numbers, the SSID in the CALPADS row will replace the SSID in the current MSIN record. This scenario is expected to be relatively rare but can occur when children have very common names, when siblings have similar names, and with twins. After clicking "OK" the modal will close automatically, and the match task is completed.

#### NO MATCH RESOLUTIONS

A fourth scenario pertains to not having a matching CALPADS record or when you feel unsure if one of the CAPADS rows is truly the same child as the MSIN record. Here is an example with records that are clearly not the same child:





In this case, click on the "No Match" button to confirm that the MSIN record could not be matched with high confidence. Keep in mind that selecting "No Match" and then clicking "Confirm" will erase any existing SSID from the child's Demographics tab (since it could not be validated). Alternatively, the system will leave the SSID field blank if it does not have one to begin with.

In the example above, we can see that the SSID in MSIN is incorrect because it belongs to a different student. As a result, clicking "No Match" clears out the incorrect SSID from the MSIN record. Note that OSYs (grade NA) will often end up being No Match situations. The same is true for children in grades PO-P5 because many have not started school and they might not have an SSID yet.

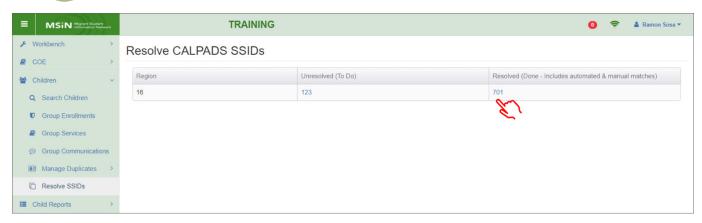
#### NAME VARIATIONS

In the screenshots above, notice that the Name field is formatted to show "Last Name [comma] First Name Middle Name" by default. Sometimes there will be a second Last Name before the comma or after the Middle Name. These variations are caused by differences in the name fields between systems (CALPADS has one Last Name field, but two names can be there). Name variations are the most common reason MSIN could not complete a match automatically, even if the names appear identical to you in the comparison modal. The second most common reason MSIN could not complete a match automatically is because of minor name differences or misspellings, particularly around first names.

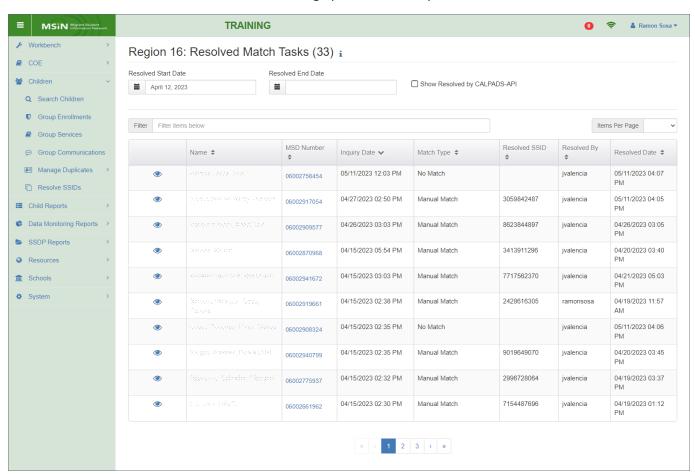
# **Confirming SSID Resolutions**

This enhancement includes features that allow Data Specialists and managers to double check their own work and monitor automated SSID matches as well. These are accessed from the main summary page:





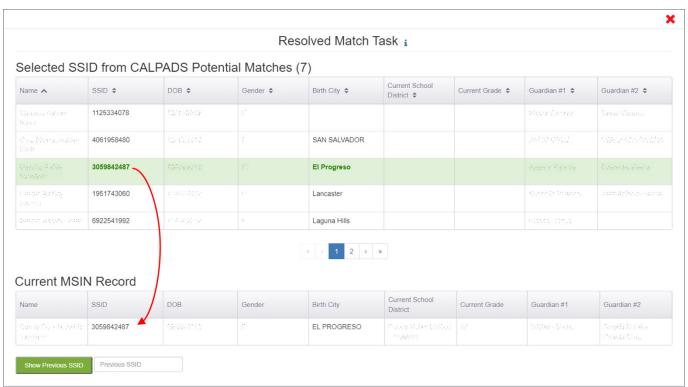
Click on the count in the "Resolved" column to bring up the list of completed match tasks.



By default, this page lists one month's worth of completed matches. This timeframe can be changed, as needed, by adjusting the "Resolved Start Date" and "Resolved End Date" fields. In addition, this page defaults to showing only Manual Match and No Match types which were manually resolved.

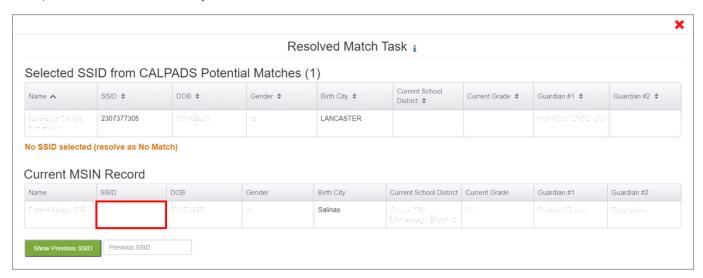
Click on a view icon to open the Resolved Match Task modal, as shown in the example below.





Because this match task has been completed, the first table in the modal shows which CALPADS record was chosen. The selected row is highlighted in green, and the text is bolded. The SSID number from the selected row also gets copied into the current MSIN record. If you would like to see the SSID number that was in the MSIN record before the match task, you can click on the button labeled "Show Previous SSID."

As shown earlier under "No Match Resolutions," a manual match task can also be completed as a No Match. These cases are visually different because the person resolving the task did not choose a row in the CALPADS table, as illustrated in this example:

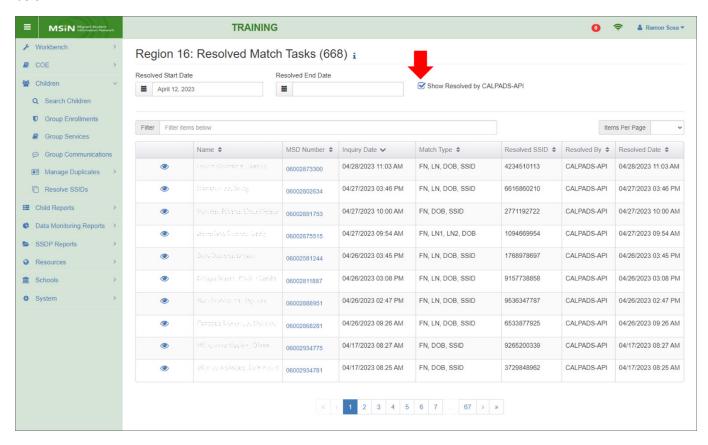


Notice that the row in the CALPADS table is not highlighted. Instead, there is a message beneath the table stating "No SSID selected." In addition, when a task is resolved as a No Match, the SSID field in the child record (under



Demographics) is cleared or blanked out, if it had an SSID, or remains blank, if it did not have an SSID. This is done because a corresponding record was not found via the CALPADS search. Again, this is most common with very young children (grade PO-P5) and OSYs (grade NA).

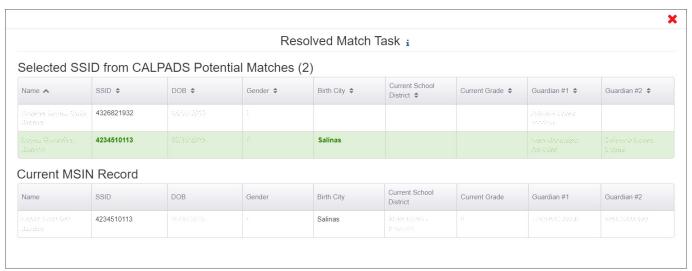
Data Specialists and managers can also see the automated matches done by the CALPADS-API component in the MSIN system. In the Resolved Match Tasks page, add a checkmark to "Show Resolved by CALPADS-API," as shown below.



Notice that the Match Type column now shows the automated match which succeeded for each child record. This means that each data element in the match type was exactly the same in both systems, MSIN and CALPADS. Most successful matches will be 1) **FN**, **LN**, **DOB**, **SSID** or 2) **FN**, **DOB**, **SSID**. Given that both types rely on existing SSID data, they validate that we already have the correct SSID number in MSIN.

Just as with the manual match types, you can open the match task modal for each child by clicking the view icon. Then you can review the content to see why the records were matched automatically. The modal's appearance is similar to those shown above, except for one small difference toward the bottom.



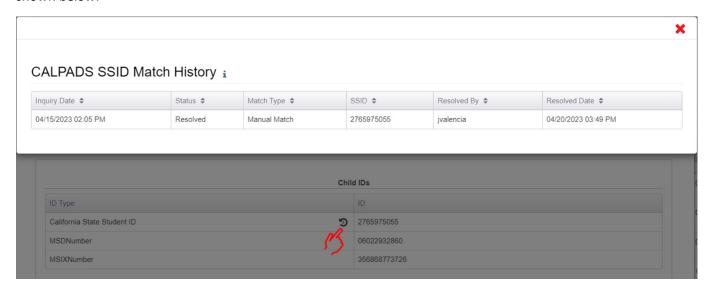


The modal for match types 1 and 2 does not have a "Show Previous SSID" because it does not apply, as success implies that both SSID numbers matched perfectly, as they were, and therefore did not change.

On occasion, you may also see match types 3) **FN, LN1, LN2, DOB** and 4) **FN, MN, DOB, Birth City**. These capture scenarios where SSIDs do not match perfectly (after attempting automated matches 1 and 2) and where MSIN child records do not have SSIDs. The modal for these match types will have a "Show Previous SSID" button. If the child did not have a previous SSID, clicking the button will display the following message: There are no previous SSIDs for this child.

### **CALPADS SSID Match History**

Information about automated and manual SSID resolutions can also be found in each child record, under the Demographics tab. A history icon has been added next to the heading for California State Student ID (SSID), as shown below:



Clicking on the history icon brings up a modal with a running list of completed SSID matches. This example shows only one SSID match that was resolved manually on 04/20/2023.



Each new match resolution can modify the child's SSID and therefore supersedes the previous completed match(es). For example, the most recent automated match in the example below shows a status of Resolved, whereas the previous match says Voided.



In this case, both match types validated the same SSID number. But in the more recent row, we see that the last name (LN) was matched perfectly as well. A common reason for seeing multiple rows is that Data Specialists can edit names to make the MSIN record more accurate. A name change or correction would automatically trigger a new CALPADS-API search and the system would complete a new cycle of automated comparisons.

In rare instances, you might see a history line that looks like this:



MSIN sent a request to search CALPADS, but the response did not contain any results (no CALPADS child records). This can occur with "here-to-work" OSYs (grade NA), very young children (grades PO-P5), and with MSIN records that contain misspelled names. Editing the child's name(s) or DOB would trigger a new search.

# **Frequently Asked Questions**

Q1. When resolving SSID match tasks, what is the confidence threshold that I should use (>85% confident, >95% confident, only 100% confident)?

You should be very confident in your decision when clicking the "Match" button and confirming. Expressed as a percentage, your confidence should be in the 90's or greater. If the DOB and/or Birth City and/or Parents are not a close match then "No Match" is a safe resolution, but we recommend taking extra steps to find the source of the discrepancy and make corrections to the MSIN child record, as needed.

Q2. Is there an expected turnaround time for unresolved match tasks?

SSID match tasks should be resolved as soon as possible throughout the performance period, just like MSIN duplicates. This is critical because SSID numbers are used to obtain migratory children's assessment and indicator data.

Q3. If the CALPADS match I want to select shows a different first name spelling, what should I do?



CALPADS data is expected to be reliable because it is aggregated from district data systems, and local policies generally require written documentation to enter child information. As result, name spellings in the CALPADS records can be used to make corrections in MSIN. This applies to first names, middle names, last names, and dates of birth (DOB). If you see a slight difference is a child's first name (Jasmine versus Jazmin) and all other data matches, then go ahead and make the correction in MSIN. Keep in mind that name changes will immediately trigger a new child search via the CALPADS-API, and you might see a new match task based on the latest child data (assuming the system could not resolve this new match task automatically).

Regarding Parent/Guardian names and Birth City, we recommend leaving them "as-is" in MSIN. Parent/Guardian data elements are not required in CALPADS (though district databased should have them) and we have noticed variations in the data. Birth city can also be tricky because of variations. Unless you have a second reliable source, it is OK to leave this information "as-is" in MSIN.

#### Q4. If I notice that another MEP staff person resolved an SSID match task incorrectly, what should I do?

Go to the student's Demographics tab in MSIN and delete the SSID number. This will trigger the system to do a new search via the CALPADS-API. You can then evaluate the options (assuming the system did not complete the match task automatically) to pick the appropriate match. If you are still not getting close matches, double check the information used to initiate the search (first name, last name, and DOB) to make sure it is correct, as this will affect the results provided by CALPADS. Make name and DOB corrections, as needed.

#### Q5. If I notice that the MSIN system resolved an SSID match task incorrectly, what should I do?

The most probable cause is erroneous matching data, like names and DOB. The first step is to double check this data by accessing a district database, CALPADS, or calling a parent/guardian. Once name and/or DOB corrections are made in MSIN, these changes will trigger the system to go through another matching cycle. Depending on the results, the system might resolve the task automatically or you may need to resolve it manually.

Q6. Why do I see some very different names in the CALPADS Potential Matches table? Some are not even close to the MSIN record.

The CALPADS feature we are accessing leverages search software called Elasticsearch. This software is currently tuned to serve several programs via the same API. As a result, you will sometimes see very different or wideranging names. This is expected, given the diverse needs this tool serves. Please continue to select matches with high confidence and ignore the options that are very different.

#### Q7. If I select "No Match" won't the child remain without an SSID indefinitely? Is some follow-up needed?

Youths who are "here-to-work" OSYs might never get an SSID. In contrast, if the child is very young, you might resolve the task as a No Match this year, but they might begin to appear in the monitoring report "R Enrolled, No SSID" when they begin attending school. If this happens, you will be reminded to add an SSID for them when they are likely to have one. Note that adding an SSID number in the child's Demographics tab will trigger a CALPADS-API search and it will probably be validated automatically.

Q8. Can I get stuck in an infinite loop if I resolve a match task as "No Match," which deletes their SSID, and then I add it back in again?

Yes, something must change in the request parameters (first name, last name, DOB) for you to get different responses from CALPADS. If you do not see a match, then always double check to make sure that MSIN has the



correct names and DOB. If the child is an attending student (not PreK or OSY), then you should be able to find a matching record in CALPADS. We recommend making names and DOB corrections to get different results, as needed.

Q9. How does this affect the MPO reports? Will children be added or removed from my MPO Reports if I resolve matches, change their SSID numbers, or have pending unresolved matches?

The CALPADS-API component is not directly linked to the MPO reports; it only affects the SSID field in the child's Demographics tab. Any work you do on SSIDs will not change the child lists within the MPO reports in the same school year.

To provide a broader context, let us summarize the indirect relationship between SSID numbers and the MPO reports. Immediately after the annual data close deadline (in mid-September), the MSIN team takes a "snapshot" of the database. The SSID numbers present in the snapshot are used to match children with their assessment results and indicators. This data is used to create new Academic Risk and PFS reports. The assessment performance data is also used by MSIN —in combination with enrollments that you add— to populate MPO report child lists (MPO 1.0, 2.0, and 5.0/6.0). The part we can control as Data Specialists is enrollment information. Only adding new enrollments can add children to applicable MPO reports, or removing enrollments can subtract them.

Note that we are using static data from the snapshot to give children annual statuses (like "below standard" and PFS) that do not change until the following snapshot is processed. As a result, working on SSID matches will not change the MPO lists in the same school year. Instead, SSID changes done in the current year will affect the assessment matching results in the following school year.

#### Q10. I noticed that a child's SSID has changed in the CALPADS system. Why would they do that?

Because CALPADS is a statewide data system, a child can move within California and end up having two SSID numbers assigned. This duplicate in CALPADS would get resolved eventually. When this happens, one of the SSID numbers will be retired.

We recommend using the SSID number shown on your most recent CALPADS search. Alternatively, you can clear/delete the child's SSID number in MSIN and the system will try to match the child automatically. If MSIN cannot resolve the match task automatically, then you can resolve it manually by choosing one of the rows in the CALPADS table.

#### Q11. What if I see that the same child has two SSIDs (or two rows in the results table with different SSIDs)?

First, confirm that it truly is the same child. Particularly with siblings, twins, and very common names, the information for two different children can seem very similar or almost the same. We recommend that you investigate further when you see two rows that seem like they belong to the same child. Check your district database, if possible, to confirm that all details match perfectly. If you have CALPADS access, check to make sure that demographic and *enrollment* information matches.

If it truly is the case that the same child has two SSIDs, and you have CALPADS or district database access, use the enrollment information to decide which row is a better match. If you do not have CALPADS or district database access, then choose one of the rows and make a note to check back in 2-3 weeks because the CALPADS system will eventually resolve the duplicate. You may also contact the district CALPADS administrator to report the duplicate, which may speed up the resolution timeline.



### **Additional Resources**

Before resolving SSID matches in the production MSIN site, we recommend practicing in the Training MSIN site (<a href="https://trainingmsin.wested.org">https://trainingmsin.wested.org</a>). Training MSIN is a safe place to try different SSID resolution scenarios. You can also experiment to see how editing child records triggers the system to make a new search via the CALPADS-API. In addition, we always recommend referencing the help text found next to each page title and modal title, by clicking the blue "a" icon.

If you have specific questions not covered in this guide, please consult with your local MSIN Power User(s). Any remaining questions can be submitted by them or your manager to the MSIN Service Desk by email (<a href="mainto:msinsupport@wested.org">msinsupport@wested.org</a>) or phone (1-800-342-2964, option 2).