What Causes Multiple UIN’S?

Simply put, a person is assigned an additional UIN when his/her information being tested for a match does not exactly match the existing information in the UIN Server. The inconsistency of the data causes the assignment of multiple UINs to a person. Below are common examples of how variances of the same information can cause incomplete search results.

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Correct</th>
<th>Variant</th>
<th>Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyphenated Name</td>
<td>Marie Rose Jimenez-Rodriguez</td>
<td>Marie Rose J. Rodriguez</td>
<td>Marie R. Jimenez</td>
</tr>
<tr>
<td>Reversed Name</td>
<td>Marie Rose Jimenez-Rodriguez</td>
<td>Rose Marie Jimenez-Rodriguez</td>
<td>Marie Rose Rodriguez-Jimenez</td>
</tr>
<tr>
<td>Misspelled Name</td>
<td>Marie Rose Jimenez-Rodriguez</td>
<td>Mary Rose Jimenez-Rodriguez</td>
<td>Marie Rose Rodriguez-Jimenez</td>
</tr>
<tr>
<td>Variation of Name</td>
<td>Marie Rose Jimenez-Rodriguez</td>
<td>Marie Jimenez-Rodriguez</td>
<td>Rosemary Jimenez-Rodriguez</td>
</tr>
<tr>
<td>Birthdate Format</td>
<td>04/03/1967</td>
<td>03/04/1967</td>
<td></td>
</tr>
<tr>
<td>Transposition</td>
<td>04/03/1967</td>
<td>04/03/1976</td>
<td>04/30/1967</td>
</tr>
<tr>
<td></td>
<td>Marie Rose Jimenez-Rodriguez</td>
<td>Marei Rose Jimenez-Rodriguez</td>
<td>Marie Rose Rodriguez-Jimenez</td>
</tr>
</tbody>
</table>

Depending on which information is used for a search, matching information may not be found. If the process is one requiring a UIN to be returned, a new UIN is generated when a match is not made. It is important to try more than one search variation to find all possible matches instead of just one exact match.

Finding a UIN Using UIN Search

Trying to find an individual’s UIN is not always straight forward. Sometimes only limited information is provided for the search parameters. Sometimes the search results will return matches that may not be an obvious match. It is important to understand how to search to obtain the optimal search results. The UIN Search program is a general search utility that can be used by many different offices to help a user find a UIN for a particular individual. Using this application correctly, the user can check to see if the person is already assigned a UIN.

Remember: Students will always already have a UIN assigned to them and new UINs should NOT be generated during the employment process.

There are four search parameters that can be used to search for UIN associated information. A search may be made using a SSN/UIN/SID, Last Name, First Name, and/or Birth date. Below is a screenshot of the UIN Search Page with an explanation of each of the search parameters.
(1) SSN/UIN/SID – Using any one of these numbers will return a list of UIN Server records that contain an exact match of that number, should that number exist in the UIN Server file in any of these data fields. This parameter will usually return only one record. If multiple records exist with the value in multiple fields, all records will be returned to the user. It can only be used by itself as a search parameter.

As of September 2006, values for the SSN field from SIMS records are no longer input if a birth date is available. In addition, existing UIN Server records were processed against the Social Security Administrations data bases and UIN Server records with a source system of SIMS only having an invalid SSN had the SSN value removed. The data in these records was proving too unreliable and causing processing problems. A periodic validation of the SSN will continue in the future.

(2) LAST NAME – The uniqueness of the Last Name determines the quantity of search results. Any name starting with the information provided will be returned. For example, Greenfield returns fewer results than Green. Compound last names are very difficult as the name may be stored in numerous ways, depending on how it was defined to the server. For example, the last name Jimenez-Rodriguez may have been entered as Jimenez Rodriguez or Jimenez or Rodriguez. Some Last Name only searches will return too many results to be able to list them all and must be more narrowly defined by using one or both of the First Name and Birthdate search parameters.

(3) FIRST NAME – This parameter cannot be used alone for a search inquiry. It is to be used with either the Last Name or Birthdate to further narrow search results. It is a good tool to find individuals with multiple UIN records due to Last Name variations. However, like the Last Name, this field may also be stored inconsistently. At times it is better to use only the first few letters of the first name to look for potential matches. Also, it may be beneficial to search for “nicknames” in the First Name field (such as Bob for Robert, Tom for Thomas, Dick for Richard, Jim for James, etc.). This additional search may reveal name variations that exist for a person in the UIN table.

(4) BIRTHDATE – This parameter cannot be used alone for a search inquiry. It is to be used with either the Last Name or First Name to further narrow search results. It is a good tool to determine if a matching Last Name is the same person but with multiple UINs. As a good thing to know, many parts of the world follow a different date format or convention. In the United States, the most common convention is MM/DD/YYYY. In many other countries, the most common convention is DD/MM/YYYY. Depending on how carefully the person filled out the form, someone from Europe could enter December 10, 1990 as 10/12/1990. To the UIN Server, this would be stored as October 12, 1990.
**Hints and Tips**

Depending on how many of the search parameters are known and the complexity of the individual’s name, there is no one best approach to finding a person with multiple UINs. Here are some helpful hints.

**SSN/UIN/SID**

If the SSN is used to search, it will return an exact match, if a record exists with that SSN. However, it may return multiple results because SIMS may input records that include the SSN as the SSN or in the SID field. It may also return no results if SIMS did not input the SSN and the person is not yet an employee.

A UIN search will return a single exact match, if the UIN exists. This will identify whether the UIN is assigned and to whom. It will not identify if this person has other UIN’s assigned to them. However, by using variations of the returned Last Name, First Name and Birthdate fields in a new search one may produce other records that have been generated due to multiple UIN assignments for this person.

The SID is used for students only and is not always input. Many old SIDs can collide with the temporary SSN convention used by B/P/P. (see ‘A Note About Social Security Numbers’ below.) This will also cause problems with UIN assignments. It is not an efficient search tool as SIMS is moving to use the UIN as the primary student ID.

The SSN/UIN/SID search is best used as a tool to determine the Last Name, First Name or Birthdate to use as search criteria for variations that may have produced another UIN for the same individual.

**Last Name**

Searching by the Last Name will return the most results. As a matter of fact, a common Last Name such as Jones may return too many results to be helpful. If this is the case, it is suggested to use one or more of the other search parameters to narrow the results. When the Last Name has many letters or is an uncommon spelling, the chance for error is higher. Better results can be obtained by entering only a partial spelling beginning with the first few letters. The Last Name search is a good tool when trying to identify other search parameters such as Birthdate or First Name.

**First Name and Birthdate**

Individually, First Name and Birthdate searches cannot be used alone. However, they may be used together. They are intended to help identify a UIN record as being unique. They may be used with the Last Name field to narrow the search results.
A Basic Search

It is uncommon for all four of the search parameters to be provided. Since the SSN/UIN/SID search returns an exact match of this value, it is not necessarily the best choice to begin searching for multiple UIN’s.

Because a Last Name search can return too many results, it is a good idea to include a second parameter to the search. Since the First Name can have variations and is a common source of errors, the Birthdate is often a better second search parameter to use.

Once the results are returned, a good idea is to choose only the rows that have matching results and exclude the others. The best way to accomplish this is by finding which parts of the three parameters match and submitting them as a new search. The results should return only the rows that need to be reviewed further.

Figure 1 Refining a Search
Reconciliation of Multiple UINs for an Individual

The design of the UIN Server is to have one unique identification number, other than the Social Security Number, by which individuals can be identified. Because of the ease with which the UIN can be initially assigned, especially for potential student records, there will be many instances where multiple assignments for the same individual will occur. While this is not necessarily a technical problem, it will lead to an increased administrative burden associated with determining which records belong to the same individual and inactivating “extra” UIN assignments for the same person. This is especially true if the individual is assigned a different number for various business functions.

Currently, there are three business applications which should be considered when it is determined that an individual has more than one UIN assigned to them. These are the Budget/Payroll/Personnel System (B/P/P), the TAMU Student Information Management System (SIMS), and the Aggie ID Card application.

If the individual’s multiple UINs have been used or assigned by applications other than B/P/P System, consult with the application manager(s), and the Aggie Card ID Office manager (currently Bob Mask) to determine which UIN may be in use by these applications. Most often, the only application that would be defined as being used by the UIN Server will be SIMS. The manager of the SIMS project is currently Larry Malota.

SIMS and the Aggie Card ID Office almost always use the same UIN and this generally is the UIN to be kept unless any other application manager can persuade these systems (offices) to convert and use an alternative UIN. There are financial costs associated with the generation of the ID card, door and building access (security) issues and the difficulty in getting individuals to return to the ID Office to get a new ID Card. Any other UINs for an individual should be inactivated and pointed to the correct UIN to be used. If these two offices (SIMS and the Aggie Card ID Office) are using different UINs, contact the managers to discuss with them which should be kept. This very rarely happens.

If the individual’s multiple UINs have been used by the B/P/P System as well, determine if the UIN has been used by SIMS and the Aggie Card ID Office as well. If so, evaluate the overall impact on the individual. Generally speaking, ID cards will have been issued, and student record and payroll records will exist for this individual. If caught early, no payroll history records will exist. In this case, inactivate the UIN(s) not being used by the Card ID Office and point them to the appropriate UIN in the UIN server.

While the Social Security Number (SSN) remains the primary key to individual records in the B/P/P System, it is usually best to change the UIN for the employee/individual in the B/P/P System to match what has been assigned through the Aggie Card ID Office. Following the appropriate updates to the UIN Server, the B/P/P System should be updated to match the UIN assigned for the individual.

It remains a long term goal to replace the SSN with the UIN as the primary key to individual records in the B/P/P System. Before that can happen, there must be a considerable administrative infrastructure established to validate the assignment of the UIN prior to an individual’s record being created in the UIN Server.

Updating the UIN Server Record

Again, individuals should only have one UIN and all A&M System business activity should utilize this single value. After an individual with multiple UINs has been isolated, the records must be updated to show only one active UIN. Click the “Details” button on a UIN Server list page to determine which systems are using the UIN. Each UIN must be verified as active by the system that uses it. Once it has been confirmed which UIN is the correct one to use, the other UIN(s) must be made inactive and pointed to the good one.
UIN records to be inactivated should ‘point’ to the active UIN. This is done by clicking the ‘Unused UIN’ box to inactivate the UIN that is not to be used. Include the UIN to remain active by placing it in the ‘Good UIN’ box.

Another purpose of updating the UIN record is to correct any Name, Birthday, Gender or other data discrepancies. Sometimes a UIN record will have invalid data in one of the other fields. This is a good time to verify the correct data and make the active record complete. Even though a UIN is inactivated, it generally should be made to match the information of the valid UIN in use. Also verify that the Active UIN has the correct Systems drop-down boxes displayed. A file of updated UINs is generated three nights a week. SIMS and the TAMU Transportation Services department have automated interfaces that use this information to update records in their applications. Other systems that are affected by the changes, including the individual impacted, should be notified of the changes.

Figure 2 Updating the UIN Record
Updating the B/P/P System UIN assignment

The B/P/P Operations Center has received authorization from the various Payroll Offices throughout the A&M System to update UINs in the B/P/P System when necessary. There are occasions when payroll office or human resource personnel create additional UINs when employing a new individual. This most often occurs when hiring a student worker. **Students will always already have a UIN assigned to them and new UINs should NOT be generated during the employment process.** After correcting the UIN server using the method above, it will be necessary to update the Employee record with the active UIN using the method below.

A process has been developed for authorized B/P/P Operations Center staff members to update the UIN in the B/P/P System. First, they must log into the BPP production region using their BPU logon ID. In the top right corner of the screen, change the library to be accessed to the BPPFIX library. At the command prompt, type UINFIX. This will start a program that updates the Employee record, any TimeTraq and any TrainTraq records with the new UIN information.
Following the program prompts, enter the SSN on the first line. Next enter the valid UIN to be used for this individual on the next line. After pressing the enter button, a pop up box will allow for a review of the updates prior to actually making the changes. With the appropriate response, the affected B/P/P System records will be updated with the data entered. If the SSN isn’t found or if the UIN already exists, an error is displayed and no updates are one. Press Enter to exit from program.

NOTE: After successfully updating the BPP System using the UINFIX program, confirm in the UIN server that the update was correctly made.
A Note about Restricted Universal Identification Numbers

Valid UINs assigned to individuals will not start with a zero (0) in the first digit as implemented for the A&M System. The first UIN assigned to an individual starts with 101.

There are many situations that call for ID or Access cards to be issued to individuals, but that do not require that the individual be assigned a UIN. Examples would be the athletic summer camps and the fireman training school held on campus. These activities typically require participants to have access to dorms and certain other campus facilities, but we do not need to generate a UIN for this access. Once the activity is complete, the access can be easily eliminated for the particular IDs assigned to these participants. The following pseudo UINs have been assigned to the offices indicated:

- **Aggie Card ID Office**: 001-00-0001 thru 010-00-9999
  - 986-00-0001 thru 986-00-0702
  - 988-00-3001 thru 988-00-8701
- **FAMIS**: 888-00-8881 thru 888-00-8884, 888-00-8888 and 999-00-9999
- **CIS**: 990-00-0001 thru 990-00-0999

A Note about Social Security Numbers

The nine digit Social Security Number is divided into the following three parts:

<table>
<thead>
<tr>
<th>DIGITS</th>
<th>NAME</th>
<th>USE/IDENTIFIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>GROUP</td>
<td>Assigned to a state for SSN assignment</td>
</tr>
<tr>
<td>4-5</td>
<td>ZONE</td>
<td>Assigned following a specified two digit pattern</td>
</tr>
<tr>
<td>6-9</td>
<td>SERIES</td>
<td>Assigned sequentially from ‘0001’ to ‘9999’</td>
</tr>
</tbody>
</table>

A valid SSN will **NOT** have a zero value in any of these three parts (Group, Zone or Series). Therefore, there will never be a valid SSN equal to a UIN, as by definition the Zone of a UIN (digits 4-5) will be “00”. This allows for immediate sight recognition between a UIN and SSN. A payroll office may assign a ‘temporary SSN’, usually for a foreign national. This will allow an employee to be paid while waiting for his permanent SSN assignment. This temporary SSN pattern established by the B/P/P System is to begin with at least three zeroes (Group). Again this allows for immediate sight recognition that this value is not a value SSN.

The SSN can be input into the UIN record from three different processes.

1. **EMPLOYMENT** – This happens when a Payroll processor enters the SSN as part of the initial employee record set-up. This is the most trusted SSN and Name entry because it is to be verified against the actual Social Security Card by the payroll or human resource office processing personnel. Records in the UIN Server having been updated by the B/P/P System may be identified in the UIN Server application in the section, **Systems Using UIN**, as “EMPL”.
2. **STUDENT ENROLLMENT** – This entry is input via SIMS during student enrollment processing when no birth date information is available. It may contain a SSN but it is entered without any verification. Records in the UIN Server having been updated by the Student Information Management System (SIMS) may be identified in the UIN Server application in the section, **Systems Using UIN** as “Sims”.
3. **ANNUAL BENEFITS ENROLLMENT** – During the Annual Benefits Enrollment process, an employee can enter the SSN for his dependents using the on-line enrollment process. Although we expect this information to be correct as it is coming from the employee, there is no verification process in place. Records in the UIN Server having been updated by the B/P/P System during Annual Enrollment may be identified in the UIN Server application in the section, **Systems Using UIN** as “DEPN”.


Because of the strict criteria used to check the validity of Social Security Numbers, a temporary SSN will not be recognized by the UIN server as a valid SSN and it will have to be ‘forced’ into the UIN server. Entering a temporary SSN into the SSN field may result in an ‘Invalid SSN’ error message being returned. To force the update, click on the first available empty drop-down box in the Systems Using UIN section and choose “EMPL”. This selection will add this application as using the UIN assignment (which it should be to have this temporary SSN) and allow the temporary SSN update to be accepted.

**Background**

Over the past decade, the fastest growing crime has become identity theft. As a result, protection of an individual’s identity is increasingly important. This is especially true of computer systems which contain most of the information related to defining identity.

Associated with the need to protect sensitive information is a growing demand by the computer user community to have a greater and freer access to the data in administrative systems. This results in even greater exposure of sensitive identity information being available to a broader group of people, increasing risk of identity exposure.

Because of this pressure to protect data and the growing need to provide access to information, an alternative identifier has been developed to assist the A&M System in identifying individuals with an affiliation with an A&M System Member. This identifier, the Universal Identification Number (UIN) is designed to allow for a unique identifier across A&M System applications and computer systems. It is anticipated that the UIN will reduce dependency on the Social Security Number and assist in the overall effort to protect an individual’s identity.

The two most readily identifiable computer applications where identity information is captured are the Student Information Systems and the Human Resource/Payroll System. Many other administrative applications use this information in the normal course of daily business processes, including such applications as the accounting systems (FAMIS, EPIK, etc.), parking systems, security and door entry access systems, e-mail systems, etc.

The concept of the UIN was developed by a committee made up mostly of Information Technology employees in the College Station area over a period of many months. Once the strategy was finalized, the staff of the A&M System offices Business Computing Services department developed the current UIN Server application to meet the initial requirements of this committee.

There are two major sources of input of identity information which generates an UIN for individuals. By far the largest number of assignments comes from the TAMU Student Information Management Systems (SIMS), as potential students submit standardized test scores and make application for admission to Texas A&M University (TAMU), Texas A&M University at Galveston or the TAMUS Health Science Center. This service has been offered to the remote campuses, but the student systems in place at these campuses offer a similar function. To date, there has been no need to develop a direct interface with these other campuses.

Data on the records from SIMS used to generate UINs is self reported by a potential student making application. Generally, an initial assignment of a UIN occurs when a file of standardized test scores is sent to a university. Potential students have requested their scores be sent to the university and these scores are loaded into SIMS. As a part of that process, identity information is passed to the UIN Server and the “new” records are assigned a UIN. This number becomes the basis for future matches for the individual for processing their application. Hence, it has a high degree of suspicion and is generally not complete. There is no automated or manual attempt to maintain the same identity information between SIMS and the UIN server. Name changes in SIMS are NOT automatically passed to the UIN server.
The second major source of UIN assignment is the Budget/Payroll/Personnel System (B/P/P). Assignments are made for all individuals identified in this system, including employees, retirees and dependents.

**NOTE:** Students from TAMU, TAMU-Galveston and the TAMUS Health Science Center who are being employed **always already have a UIN assigned to them.** The trick is to find it and not create a new one.

UIN assignments can be made individually by the TAMU Computer Information Services department, the TAMU ID Card Office and FAMIS security officers. All of these offices (as well as members of the BCS department) are cautioned to use the most strict and positively identifiable criteria possible when creating records for individuals in the UIN Server.

To date, no central office has been identified as the A&M System Identity Office. The Business Computing Services (BCS) department continues to be the primary point of contact and user support for this application. The BCS department coordinates with the various A&M System payroll offices, human resource offices, TAMU Card ID Office and the TAMU SIMS IT support department to resolve UIN issues.

The UIN Server has many other application users and many A&M System business applications are slowly moving to utilize the UIN as a primary identifier.