

Subject Management





CHAPTER 6 – SUBJECT MANAGEMENT

he Subject Management Module enables data to be associated with a research participant without exposing or transferring the research participant's personally identifiable information (PII). This is done by using a GUID (Global Unique Identifier) It is randomly generated, alphanumeric code that is not generated directly from PII. This capability provides two primary benefits. First, it allows data about a research participant to be accumulated across projects over time, regardless of where and when that data were collected. Secondly, it enables a researcher to define a study population while supporting a research hypothesis, even if the data were not collected by the researcher.

This second benefit is further enabled through the use of the Multi-Tenant GUID server (Centralized GUID Solution), which facilitates the sharing of GUIDs across diseases and/or institutes in a secure manner.

The GUID Client software is a JavaScript application that runs directly in your web-browser. The GUID Client is supported on all browsers (Google Chrome, Firefox, Microsoft Edge, and Safari.

6.1 Subject Management PROCESS

Researchers collect PII (sometimes referred to as Private Health Information or PHI) from their participants and store that data in a local database that is not made available outside the research institution. Typically, that data is only available to a limited number of individuals. It is the availability of this at the investigator's site that is used to generate GUIDs (Global Unique Identefiers). This is made possible by issuing special software that runs at the research site on an investigator's computer or allowing users to access it through an application. This software performs a one-way encryption, often called a one-way hash, which is sent to the Subject Management Client to determine if the research subject hash codes have been seen by the system before. The encrypted hash codes do not have information to recreate the PII. However, they do have enough information to determine if a research participant and associated GUID already exists in the system.

6.2 System Functions

The following are the service functions that compose the GUID Module:

- Create GUID This function generates a valid GUID, provided the minimum required PII information is available. This module uses a hash function to generate a unique GUID for each participant. (Refer to the valid versus Pseudo-GUID section for more information).
- Convert Pseudo GUID to GUID Allows users to convert Pseudo-GUIDs to valid GUIDs. Users need to provide the minimum required PII fields and the Pseudo-GUIDs.
- Create Multiple GUIDs (With Close Match Checking and Without Close Match Checking) This function generates multiple participant GUIDs from a single call to the server. The batch functionality will process 50 participants at a time with a 5 minute delay between each 50 participants processed. The functionality operates using a .csv file that includes PII information (Refer to Table 1. PII Fields) and creates as an output with the list of GUID(s).

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- Generate Pseudo GUID Generates a Pseudo-GUID with a different format from a valid GUID. A Pseudo-GUID is a unique ID that is not based on PII. PII is not required to obtain a Pseudo-GUID. This function should only be used if a user is unable to get a valid GUID using the Create GUID function due to insufficient PII for a participant. (Refer to the valid GUID versus Pseudo-GUID section for more information on Pseudo-GUIDs.)
- Search if GUID (or Pseudo GUID) exists in the system- Allows users to check if a GUID (or Pseudo GUID) exists in the database. Users must provide a valid GUID or a Pseudo-GUID to use this function. If the submitted GUID exists in the database, the result will state "The GUID already exists". If the GUID does not exist in the database, the result will state "The GUID does not exist."

Things to Note:

*

ICON KEY

🛄 Notes

ImportantInformation

A one-way hash is a reproducible method of turning any data into a (relatively) small number that may serve as a digital "fingerprint" of the data. The algorithm "chops and mixes" (i.e., substitutes or transposes) the data to create such fingerprints. The hash represents the "fingerprint". However, it cannot be used to recreate the original.

6.3 PII FIELDS USED TO GENERATE A GUID

The PII fields that are used to generate a GUID are listed below in Table 1. The PII fields are pieces of data that will not change over the lifetime of the participant and are uniquely specific to the participant. Each PII field has an associated probability of a match in the general population. By combining full legal name, date of birth, and municipality of birth, the probability that two individuals share the same information and thus the same hash codes (i.e. a false positive) becomes negligible and is the minimum required information to generate a valid GUID. Additional data that is provided beyond the required minimum further decreases the probability of a false positive.

Additionally, in order to generate a GUID, the following PII is required:

- ◆ Complete legal given (first) name of the subject at birth
- ✤ If the subject has a middle name
- ✤ Complete legal family (last) name of subject at birth
- ✤ Day of birth
- Month of birth
- ✤ Year of birth
- * Name of city/municipality in which subject was born
- Country of birth

ICON KEY

Things to Note:

When inputting participant information, it is recommended that the information is derived from a government issued document/resource, such as a birth certificate or driver's license.

Delta Notes

✤ Important

Information



6.3.1 PII Fields Table

| PII Field name | GUID Client Abbreviations | PII Required for Valid GUID | | |
|--|---------------------------|-----------------------------|--|--|
| Complete legal given name of subject at birth | FIRST_NAME | Yes | | |
| Indicator if subject has a Middle Name at Birth | SUBJECT_HAS_MIDDLE_NAME | Yes | | |
| Complete additional legal name or names at birth | MIDDLE_NAME | No | | |
| Complete legal family name/surname of subject at birth | LAST_NAME | Yes | | |
| Day of Birth | DOB | Yes | | |
| Month of Birth | MOB | Yes | | |
| Year of Birth | YOB | Yes | | |
| City or Municipality of Birth | CITY_OF_BIRTH | Yes | | |
| Country of Birth | COUNTRY_OF_BIRTH | Yes | | |

| PII Field name | GUID Client Abbreviations | PII Required for Valid GUID | | | |
|--|-------------------------------------|-----------------------------|--|--|--|
| Government Issued or National ID (For the United States, this is the Social Security Number) | GIID | No | | | |
| Country Issuing Government- Issued or National ID | GIIDCOUNTRY | No | | | |
| Organization/Cohort Association | ORGANIZATION_COHORT_ASS OCIATION | No | | | |
| Physical sex of subject at birth [M/F] | SEX | No | | | |

NOTE: The "Organization/Cohort Association" field is specific to the Parkinson's Disease Biomarkers Program (PDBP) instance of BRICS. Values for this field will only be available for PBDP.

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6.3.2 Special Instructions

Listed below are some special instructions that must be followed in order to ensure a valid GUID is created:

- 1. The "Last Name" field must contain the family name given at birth, prior to legal name change, or marriage. If there is any doubt as to the original legal name at birth, refer to the information on the birth certificate. Name suffixes such as "Jr.", "Sr.", "III", etc. should be ignored.
- 2. If the participant's "First Name" is a compound name, such as Anne Marie, or Jose- Luis, it may be unclear whether the second part of the compound is a first name or a middle name. In such cases, use the first name as you would report it on other records, such as school transcripts, or credit card billing statements. If in doubt, refer to the birth certificate.
- **3.** If the participant does not have a "Middle Name" (known not to have a middle name at birth), leave this field blank and respond "No" when asked if the individual has a middle name. The GUID Software has a selection to accommodate this possibility. If in doubt, refer to the birth certificate.
- **4.** If the "City or Municipality of Birth" has undergone a name change during a participant's lifetime, use the name of the city at the time of the participant's birth. Examples of this are Peking / Beijing, or Bombay / Mumbai. Again, if there is any doubt, refer to the birth certificate.

It is recommended that the participant's birth certificate and any copies of the participant's birth certificate be returned to the participant and not retained by the site.

6.3.3 Valid GUID Versus Pseudo-GUID

A Valid GUID is a GUID that has been successfully issued using PII and is always a random ID. For retrospective data, it is understood that the minimum amount of PII may not be available or sufficient to generate a Valid GUID. For this reason, the tool provides the capability to issue a Pseudo-GUID. A Pseudo- GUID contains no PII and can be generated using the Generate Pseudo GUID function. Like a GUID, a Pseudo-GUID will always be unique. Pseudo-GUIDs are not compared to other participants (including Valid GUIDs). The advantage of using a Pseudo-GUID as an ID within a study is that it can later be updated to get a new Valid GUID while maintaining a mapping in the system for the Pseudo-GUID to the Valid GUID.

6.3.4 GUID Composition

A GUID must start with a prefix. The prefix is typically an abbreviation of a disease category. Examples of prefixes are TBI for Traumatic Brain Injury, PD for Parkinson's disease, and GRDR for Global Rare Diseases (Patient) Registry and Data Repository. An example of a Valid GUID is: **TBIAC412JJK**

Users participating in the Multi-Tenant GUID server will generate a universal GUID with an NIH prefix consisting of ten (10) alphanumeric characters. An example of a Multi-Tenant GUID is: **NIH07HB8I7JK7**

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6.3.4 GUID Composition

The GUID consists of a prefix, GUID pattern, and check character.

- The prefix is dependent on what BRICS instance you're using.
- The GUID pattern follows the schema: **AANNNAA** Where **A** represents an alphabetic with the exception of the letters: I, O, S (as they are easily confused with certain numbers). **N** represents a number. Both **A** and **N** are generated using a nondeterministic random number generator.
- The check character can be numerical or alphabetic.

Here is a valid GUID sample: TBICJ743PV3

Where,

| Prefix: | TBI |
|----------|---------|
| Pattern: | CJ743PV |
| Check: | 3 |

6.3.5 Pseudo-GUID Composition

Here is a Pseudo-GUID sample: **TBI_INVZG542YHV** The format of the pseudo-GUID is identical to that of a valid GUID with the exception that the prefix will differ. Here it is **TBI_INV** instead of **TBI**.

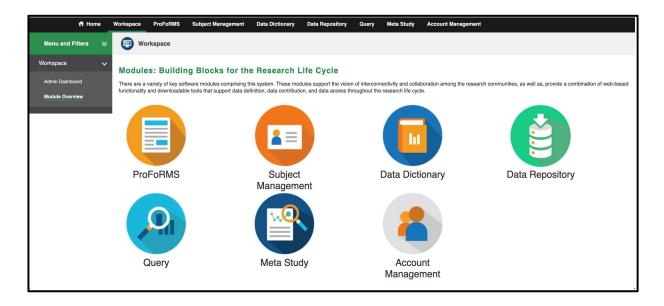


6.4 USING THE Subject Management TOOL

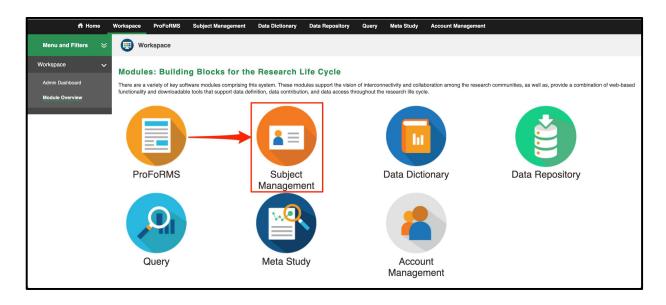
The Subject Management client software is a web-based, JavaScript application and is accessible directly through your internet browser.

To access the Subject Management module: Perform the following actions:

1. Log in and navigate to the **Workspace screen** where all modules you have access to are displayed.



2. Click the Subject Management module to enter the Subject Management Tool.





3. The **Subject Management -** My Subjects page opens where you can view/search your current subjects.

| 🕇 Home | Workspace ProFoRM | S Subject Management | Data Dictionary | Data Repository | Query | Meta Study | Account Management | | | |
|--------------------------|----------------------------|----------------------------------|-----------------|-----------------|-------------|----------------|------------------------|-----------------|----------------------|--|
| Menu and Filters 🛛 💝 | Subject Mana | gement | | | | | | | | |
| Subject Management 🗸 🗸 | Subject Manag | jement Tool | | | | | | | | |
| My Subjects | Add Subject Add Multi | ple Subjects Download N | ine Only V All | | | | Search: 🗸 | | | |
| Create Subject | ID | \$ TYP | E 🔶 EI | NTITY 🜲 | ORGANIZATIO | N REGISTERED B | Y 🜲 USER REGISTERED BY | DATE REGISTERED | LINKED TO | |
| Manage Multiple Subjects | TBIDEMOKB275ZR0 | GL | ID F | ITBIR | BRICS | | Rutherford, John | 2022-05-11 | | |
| Subject Admin 🔉 | Showing 1 to 1 of 1 entrie | s (filtered from 2,388 total ent | ies) | | | | | First | Previous 1 Next Last | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

6.4.1 Creating GUIDs in the Subject Management TOOL

- 1. Open the Subject Management Module.
- 2. Open the **Create Subject** on the left-side tool bar.

| ff Home | Workspace ProFoRMS | Subject Management | Data Dictionary | Data Repository | Query | Meta Study | Account Management | | | | |
|----------------------------|----------------------------|------------------------------------|-----------------|-----------------|------------|------------------|------------------------|-----------------|------------------------|--|--|
| Menu and Filters $$ | Subject Management | | | | | | | | | | |
| Subject Management 🗸 | Subject Manag | ement Tool | | | | | | | | | |
| My Subjects Create Subject | Add Subject Add Multip | Download Mi | ne Only ~ All | ~ | | | | Search: | | | |
| Create Subject | ID | 🔶 ТҮРЕ | : 🔶 EN | лттү 🔶 | ORGANIZATI | ON REGISTERED BY | Y 🍦 USER REGISTERED BY | DATE REGISTERED | LINKED TO | | |
| Manage Multiple Subjects | TBIDEMOKB275ZR0 | GUI | D FI | ITBIR | BRICS | | Rutherford, John | 2022-05-11 | | | |
| Subject Admin > | Showing 1 to 1 of 1 entrie | s (filtered from 2,388 total entri | es) | | | | | Firs | t Provious 1 Next Last | | |



3. The Data Privacy user agreement may appear on the page. If it does. Read the agreement and Click **Accept** if you agree. The GUID Client will open and appears directly on the page.

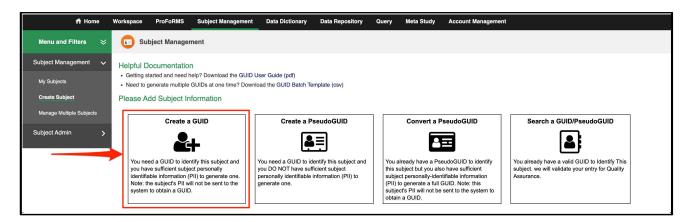
Data Privacy

This system is a collaborative environment with privacy rules that pertain to the collection and display of imaging data. Before accessing and using this system, please ensure you familiarize yourself with our privacy rules available through the Data Access Request and supporting documentation.

The collection of this information is authorized under 42 U.S.C. 241, 242, 248, 281(a)(b)(1)(P) and 44 U.S.C. 3101. The primary use of this information is to facilitate medical research. This information may be disclosed to researchers for research purposes, and to system administrators for evaluation and data normalization.

Rules governing the submission of this information are based on the data-sharing rules defined in the Notice of Grant Award (NOGA). If you do not have a grant defining data sharing requirements, data submission is voluntary. Data entered into the system will be used solely for scientific and research purposes and is designed to further the understanding of the disease. Modification of information may be addressed by contacting your system administrator at dcbbrics@nih.gov. The significant system update information may be posted on the site as required

4. Click Create a GUID.



I AGREE

I DO NOT AGREE



5. The GUID Client will open directly in the browser on the page. Enter the participant's information (Subject's Personal Identifiable Information (PII)) into the appropriate fields. To ensure the information provided is accurate, the system requires duplicate data entry. Re-enter the Subject's Personal Identifiable Information (PII) to confirm the subject's information.

| n Home | Workspace ProFoRMS Subject Management Data Dictionary | Data Repository Query Meta Study Acco | punt Management | | | | | | | | |
|--------------------------|--|--|---|--|--|--|--|--|--|--|--|
| Menu and Filters $$ | Subject Management | | | | | | | | | | |
| Subject Management 🗸 | Helpful Documentation | | | | | | | | | | |
| My Subjects | Getting Started and need help? Download the GUID User Guide (pdf) Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) | | | | | | | | | | |
| Create Subject | Please Add Subject Information | | | | | | | | | | |
| Manage Multiple Subjects | RETURN TO GUID OPTIONS | | | | | | | | | | |
| Subject Admin > | Required Fields 1. Complete legal given (first) name of the subject at birth 2. Does the subject have a middle name? 3. Complete legal family (last) name or names at birth 4. Complete legal family (last) name of subject at birth 5. Day of birth (1-31) 6. Month of Birth 7. Year of Birth {###J] 8. Name of city/municipality in which subject was born 9. Country of Birth Optional Fields 10. Physical sex of subject at birth [M/F] 11. Government Issued or National ID 12. Country Issuing Government-Issued or National ID GUID | Please Enter Subject's Information (PII) No Do not use abbreviations (e.g. Saint Louis not St Louis) Copy GUID Copy GUID and PII Clear/New | Please Confirm (Re-Enter) the Subject's Information No V Do not use abbreviations (e.g. Saint Louis not St Louis) V V | | | | | | | | |

The required field names necessary to obtain a valid GUID are listed below:

- Complete legal given (first) name of the subject at birth
- Select YES if the subject DOES HAVE a Middle Name, NO otherwise
- Complete additional (middle) name or names at birth
- Complete legal family (last) name of subject at birth
- Day of birth [1-31]
- Month of birth [January-December]
- Year of birth [####]
- Name of city/municipality in which subject was born
- Country of birth

The following are additional fields that can be used, but are not required:

- Physical sex of subject at birth [Male/Female]
- Government Issued or National ID number
- Name of the country issuing the Government or National ID
- Organization/Cohort Association



- 6. To register and obtain the GUID, complete the following steps, starting in the left column:
 - a) Enter in the complete legal given (first) name of subject at birth;
 - b) Select Yes or No depending on whether or not the subject has a middle name. If yes, enter information in field 3;
 - c) Complete the required fields 4-9;
 - d) If information is available, complete the optional fields 10-12. Enter the subject's physical sex at birth into #10 field, the government issued or national ID number into #11 field (note that the list box in #12 field becomes available once data is entered into #11);
 - e) Select the country of issued ID from the list provided;
 - f) For PDBP only, select a value in the "Organization/Cohort Association" (field #13) to associate the GUID with a PDBP study, cohort, or other defined study component;
 - g) Enter the same information into the right column of the dialog box
- 7. After inputting the participant's PII into both sets of fields, click the **Generate GUID** button. Note: Spaces, hyphens and apostrophes can be used in the non-numeric GUID fields in the dialog box and are stripped silently by the application.

| Menu and Filters $~~$ $\gtrsim~~$ | Subject Management | | | | | | | | | | |
|-----------------------------------|--|---|---|--|--|--|--|--|--|--|--|
| Subject Management 🗸 🗸 | Helpful Documentation | | | | | | | | | | |
| My Subjects | Getting started and need help? Download the GUID User Guide (pdf) Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) | | | | | | | | | | |
| Create Subject | Please Add Subject Information | | | | | | | | | | |
| Manage Multiple Subjects | RETURN TO GUID OPTIONS | | | | | | | | | | |
| Subject Admin > | Required Fields 1. Complete legal given (first) name of the subject at birth 2. Does the subject have a middle name? 3. Complete additional (middle) name or names at birth 4. Complete legal family (last) name of subject at birth 5. Day of birth [1-31] 6. Month of Birth 7. Year of Birth (####] 8. Name of clty/municipality in which subject was born 9. Country of Birth Optional Fields 10. Physical sex of subject at birth [M/F] 11. Government Issued or National ID 12. Country Issuing Government-Issued or National ID GUID | Please Enter Subjects Information (PII) No O Do not use abbreviations (e.g. Saint Louis not St Louis) | Please Confirm (Re-Enter) the Subject's Information No Do not use abbreviations (e.g. Saint Louis not St Louis) | | | | | | | | |
| | Generate GUID | Copy GUID Copy GUID and PII Clear/New | | | | | | | | | |



8. To copy the new GUID, you must press the "**Copy**" button to copy the GUID to the Clipboard from where you may paste the new GUID. <u>Note</u>: A Clipboard is a location in memory where the system saves information copied.

| GUID Tool | Create GUIDs In order to protect the privacy of study particip tool requires a version of Java to be installed New GUID: TBIXY080ATARJ | and e |
|---------------|---|-------|
| GUID Overview | Helpful Documentation | |
| Create GUIDs | Getting started and need help? Downlo | |
| My GUIDs | Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) | |
| | Functions About | |

9. A popup window with the GUID information will appear if there was a successful GUID generation. Click the **OK** button to exit the dialog box.

| GUID Tool | Create GUIDs In order to protect the privacy of study particip tool requires a version of Java to be installed New GUID: TBIXY080ATARJ | nd e |
|----------------------------|---|------|
| GUID Overview Create GUIDs | Helpful Documentation • Getting started and need help? Downlo | |
| My GUIDs | Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) Functions About | |



6.4.2 Creating Multiple GUIDs Using Batch CSV

The batch capability allows a user to create multiple GUIDs at a time with the option of checking for similar already-entered PII. In order to create multiple GUIDs, you must download and use the GUID batch .csv template.

To Generate GUIDs for multiple Subjects using batch .csv: Perform the following actions:

- 1. Open the Subject Management Module.
- 2. Open the Manage Multiple Subjects on the leftside tool bar.

| 📅 Home | Workspace ProFoRMS | Subject Management | Data Dictionary | Data Repository | Query | Meta Study | Account Management | | |
|--------------------------|--------------------------------|----------------------------------|-----------------|-----------------|------------|-----------------|------------------------|-----------------|---------------------------|
| Menu and Filters 🛛 💝 | Subject Manage | ment | | | | | | | |
| Subject Management 🗸 🗸 | Subject Manage | ment Tool | | | | | | | |
| My Subjects | Add Subject Add Multiple | Subjects Download Mine | e Only v All | All v | | | | | |
| Create Subject | ID | 🔷 ТҮРЕ | 🔶 ENT | іту 🔶 | ORGANIZATI | ON REGISTERED B | Y 🜲 USER REGISTERED BY | DATE REGISTERED | LINKED TO |
| Manage Multiple Subjects | O | GUID | FIT | BIR | BRICS | | Rutherford, John | 2022-05-11 | |
| Subject Admin > | Showing 1 to 1 of 1 entries (1 | iltered from 2,388 total entrie: | 5) | | | | | F | irst Previous 1 Next Last |
| | - | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

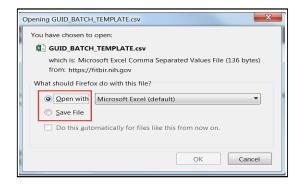
3. Click the **Batch Template (csv)** to download the GUID Batch template to your local machine.

| Menu and Filters ≫ | Subject Management | |
|--------------------------|---|--------------------------|
| Subject Management 🗸 | Create Multiple Subjects | |
| My Subjects | Use the below tool to create or edit multiple Subjects at once. The tool will perform the correct process based on your input CSV file. | |
| Create Subject | To begin the state of the second state of the | |
| Manage Multiple Subjects | You provide a GUID or PseudoGUID with no PII and a Subject exists for that GUID - The Subject will be updated with any additional fields (an edit operation) You provide a GUID or PseudoGUID with no PII and a Subject does not exist for that GUID - A Subject will be created for that GUID/PseudoGUID | |
| Subject Admin > | You Provide a PseudoGUID with PII - The PseudoGUID will be converted to a GUID then a Subject will either be edited or created depending on its existence | |
| | You provide neither a GUID or a PseudoGUID with PII - a GUID will be generated then a Subject will either be edited or created depending on its existence You provide none of GUID, PseudoGUID, or PII - an error will be displayed. A Subject requires a GUID, PseudoGUID, or the ability to generate one | |
| | Upload batch file Choose File No file chosen Use close match checking? | |
| | Status: All V Download | Search: |
| | REFERENCE ID 🔺 GUID 🛊 STATUS 🌲 MESSAGE | \$ |
| | No data available in table | |
| | Showing 0 to 0 of 0 entries | First Previous Next Last |
| | | |

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4. The **GUID_BATCH_TEMPLATE** launcher opens. Select the Open with or Save File option to download the template.



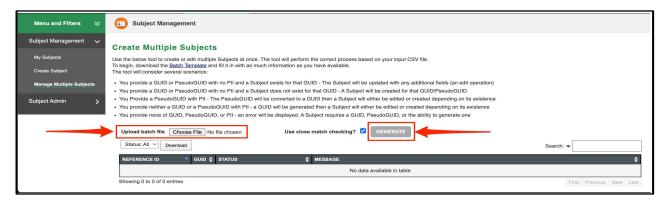
5. Upon successful download of the .csv template, Open the template and enter the participant's information into the proper columns. For descriptions of column headers, please refer to Section **6.3.1 PII Fields** above.

| | А | В | С | D | E | F | G | Н | | J | Κ | L | Μ |
|---|--------------|------------|-------------|-----------|-------------------------|-----|-----|------|----------|---------|-----|-------------|-------------|
| 1 | REFERENCE_ID | FIRST_NAME | MIDDLE_NAME | LAST_NAME | SUBJECT_HAS_MIDDLE_NAME | MOB | DOB | YOB | CITY_OF_ | COUNTRY | SEX | GIID | GIIDCountry |
| 2 | 1 | Thomas | Jacob | Lee | Yes | 9 | 13 | 1988 | dc | US | М | 123-24-2455 | US |
| 3 | 2 | Gerald | Dean | White | Yes | 10 | 14 | 1989 | dc | US | | 134-15-2114 | US |
| 4 | 3 | Joe | | Schmoe | No | 11 | 12 | 1976 | Bethesda | US | | | |
| 5 | 4 | Linda | | Johnson | No | 8 | 1 | 1980 | Wheaton | US | F | | |
| 6 | | | | | | | | | | | | | |

- ♦ Each row contains (1) participant's information
- The REFERENCE_ID (in cell A2) may be any alphanumeric identifier but must be unique within this batch. This ID will be provided along with the GUID after the batch process completes to ensure the proper GUID is associated with its input PII
- ✤ For MOB, use a numeric value (1-12)
- For COUNTRY_OF_BIRTH and GIIDCOUNTRY, please use the country codes listed in Appendix 6-A of the module. For United States, use US.
- ✤ GIID and GIIDCOUNTRY [Optional]
- For GIID, if Country issuing the ID is the United States, please submit data in this format ###-#####
- Note: The "Organization/Cohort Association" field is not available for use when generating GUIDs using the batch GUID template. This field is only available when generating a GUID using the GUID client.
- ✤ Save the template in CSV format.



6. Select Choose File and upload the desired .csv file containing the subject(s) information. Then click the Generate button



7. After choosing the desired .csv and clicking generate, the process will begin. You will see the generated GUID's appear in the table and the user can download them.

| Menu and Filters $$ | Subject Manager | Subject Management | | | | | | | |
|--|---|--------------------|---------|--|----------------------------|--|--|--|--|
| Subject Management 🗸 🗸 | Create Multiple Subjects | | | | | | | | |
| My Subjects | Use the below tool to create or edit multiple Subjects at once. The tool will perform the correct process based on your input CSV file. To begin, download the Batch Template and fill it in with as much information as you have available. | | | | | | | | |
| Create Subject | The tool will consider several | scenarios: | | | | | | | |
| Manage Multiple Subjects Subject Admin | You provide a GUID or PseudoGUID with no PII and a Subject exists for that GUID - The Subject will be updated with any additional fields (an edit operation) You provide a GUID or PseudoGUID with no PII and a Subject does not exist for that GUID - A Subject will be created for that GUID/PseudoGUID You Provide a GUID or PseudoGUID with PII - The PseudoGUID will be converted to a GUID than a Subject will either be edited or created depending on its existence You provide none of GUID, PseudoGUID with PII - a GUID will be converted to a GUID then a Subject will either be edited or created depending on its existence You provide none of GUID, PseudoGUID, or PII - an error will be displayed. A Subject requires a GUID, PseudoGUID, or the ability to generate one Upload batch file Choose File GUID BATMPLATE.csy Use close match checking? | | | | | | | | |
| | Status: All 🗸 Downloa | d | | | Search: | | | | |
| | REFERENCE ID | GUID 🔶 | STATUS | MESSAGE | \$ | | | | |
| | 1 | TBIDEMOFD007MKE | success | A Subject has been created with GUID TBIDEMOFD007MKE | | | | | |
| | 2 | TBIDEMOXJ179YK5 | success | A Subject has been created with GUID TBIDEMOXJ179YK5 | | | | | |
| | Showing 1 to 2 of 2 entries | | | | First Previous 1 Next Last | | | | |

NOTE: Errors that occurred during processing will appear in the table below

| n Home | Workspace ProFoRMS | Subject Management | Data Dictionary Data Repository | Query Meta Study | Account Management | | | |
|-----------------------------------|--|------------------------|---------------------------------|---------------------------------|---|--|--|--|
| Menu and Filters $~~$ $\gtrsim~~$ | Subject Managem | ent | | | | | | |
| Subject Management 🗸 | Management V Create Multiple Subjects | | | | | | | |
| My Subjects Create Subject | Use the below tool to create or edit multiple Subjects at once. The tool will perform the correct process based on your input CSV file. To begin, download the <u>Batch Template</u> and fill it in with as much information as you have available. The tool will consider several scenarios: | | | | | | | |
| Manage Multiple Subjects | You provide a GUID or PseudoGUID with no PII and a Subject exists for that GUID - The Subject will be updated with any additional fields (an edit operation) You provide a GUID or PseudoGUID with no PII and a Subject does not exist for that GUID - A Subject will be created for that GUID/PseudoGUID | | | | | | | |
| Subject Admin 🔉 | You Provide a PseudoGUID with PII - The PseudoGUID with PII - The PseudoGUID with PII - The PseudoGUID with PII - a GUID then a Subject will either be edited or created depending on its existence You provide neither a GUID or a PseudoGUID with PII - a GUID will be converted to a GUID then a Subject will either be edited or created depending on its existence You provide none of GUID, PseudoGUID, or PII - an error will be displayed. A Subject requires a GUID, PseudoGUID, or the ability to generate one | | | | | | | |
| | Upload batch file Choo | se File GUID_BATMPLATE | E.csv Use close match checking? | GENERATE | | | | |
| | Status: All 🗸 Download | 5 | | | Search: | | | |
| | REFERENCE ID | 🔪 guid 🌲 status | MESSAGE | | \$ | | | |
| | 1 | error | Marker for wheth | her the subject has a middle na | ame is missing or doesn't match the required values | | | |
| | 2 | error | Marker for wheth | her the subject has a middle na | ame is missing or doesn't match the required values | | | |
| | Showing 1 to 2 of 2 entries | | | | First Previous 1 Next Last | | | |

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NOTE: If subsequent requests for multiple GUIDs are sent, the required wait time between sending each GUID request containing 50 participants is 30 seconds. Reference the Status field for additional details and confirmation that the .csv file selected uploaded correctly.

8. To obtain a full report of errors, potential matches, and/or other information pertaining to the GUID generation process, click the **Download** button.

| Menu and Filters 🛛 💝 | Subject Managem | Subject Management | | | | | | | |
|-------------------------------|---|--|---------|--|----------------------------|--|--|--|--|
| Subject Management 🗸 | Create Multiple S | Create Multiple Subjects | | | | | | | |
| My Subjects Create Subject | To begin, download the Batch | Jse the below tool to create or edit multiple Subjects at once. The tool will perform the correct process based on your input CSV file. o begin, download the <u>Batch Tamplate</u> and fill it in with as much information as you have available. The downlid consider several scenarios: | | | | | | | |
| Manage Multiple Subjects | You provide a GUID or PseudoGUID with no PII and a Subject exists for that GUID - The Subject will be updated with any additional fields (an edit operation) You provide a GUID or PseudoGUID with no PII and a Subject does not exist for that GUID - A Subject will be created for that GUID/PseudoGUID | | | | | | | | |
| Subject Admin 🔉 | Vou Provide a Solici on secondordin min or main a Subject with that Guiper Minia Guiper Min | | | | | | | | |
| | Uplead batch file Choose File GUID_BATMPLATE.csv Use close match checking? Z GENERATE Status: All V Download Search: | | | | | | | | |
| | REFERENCE ID | GUID 🔶 | STATUS | ♣ MESSAGE | \$ | | | | |
| | 1 | TBIDEMOFD007MKE | SUCCESS | A Subject has been created with GUID TBIDEMOFD007MKE | | | | | |
| | 2 | TBIDEMOXJ179YK5 | success | A Subject has been created with GUID TBIDEMOXJ179YK5 | | | | | |
| | Showing 1 to 2 of 2 entries | | | | First Previous 1 Next Last | | | | |

9. Save the .csv report file, which will include the following default filename prefix: "output_guid." The GUID output file will provide a list of successfully generated GUIDs along with errors and notations:

| А | В | С | D |
|-------------|---------------|-----------------|--|
| referenceId | guid | serverShortName | notes |
| 1 | | | A close match was found: Month of Birth. Current value: 11 |
| 2 | TBIHP337FWXVC | FITBIR | |
| 3 | TBIHU206FYKXZ | FITBIR | |
| 4 | TBINE514UGTLP | FITBIR | |

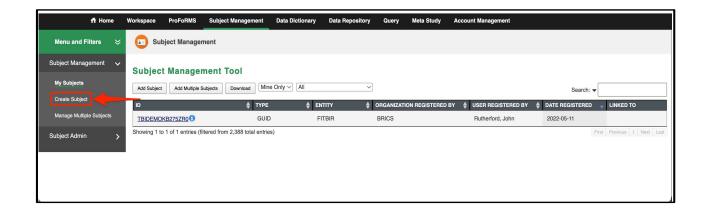
<u>NOTE</u>: If you receive a "close match was found" note, but the subject information provided is accurate, retry the upload using the **Create Multiple GUIDs (No Close Match Checking)** option in the Functions menu.



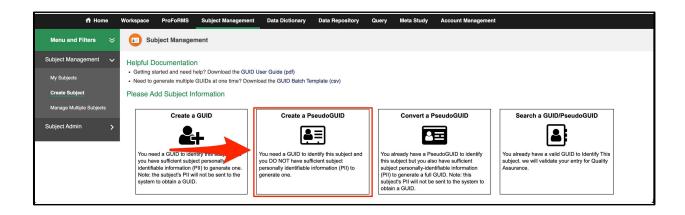
6.4.3 Generate a Pseudo GUID

To Generate a Pseudo-GUID: Perform the following actions:

1. Navigate to the Create Subject page (Refer to 6.4.1 steps 1-2).

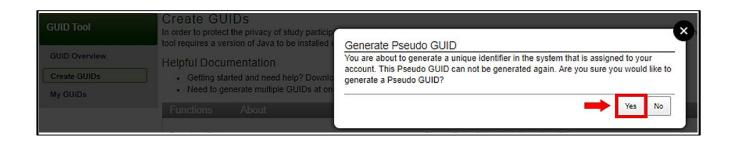


2. Select Create a Pseudo GUID as shown below.





3. The Generate Pseudo GUID dialog box appears with the following message: "You are about to generate a unique identifier in the system that is assigned to your account. This Pseudo GUID can not be generated again. Are you sure you would like to generate a Pseudo GUID?" Click the Yes button to generate the Pseudo-GUID.



4. The **Get Pseudo GUID** dialog box appears with the Pseudo GUID. Click the **Copy** button to "Copy" the Pseudo GUID to the Clipboard from where you may paste the Pseudo GUID from. **Note:** Only one Pseudo GUID can be saved to the clipboard at a time.

| | protect the privacy of study participants, the GUII s a version of Java to be installed (| D tool is run locally. By selecting the link below, the GUID tool will be downloade han |
|--|--|---|
| GUID Overview Helpful D Create GUIDs • Gett | Documentation ing started and need help? Downlo d to generate multiple GUIDs at on | Ido GUID GUID: TBI_INVFU017XDNGD Ok Copy |

5. Click the **OK** button to exit Get Pseudo GUID dialog box.

| GUID Tool | Create GUIDs In order to protect the privacy of study participants, the GUID tool is run locally. By selecting the link below, the GUID tool will be downloaded to tool requires a version of Java to be installed (|
|-------------------------------------|--|
| GUID Overview Create GUIDs My GUIDs | Helpful Documentation Geting started and need help? Downlo Need to generate multiple GUIDs at on Ok Copy |
| | Functions About |



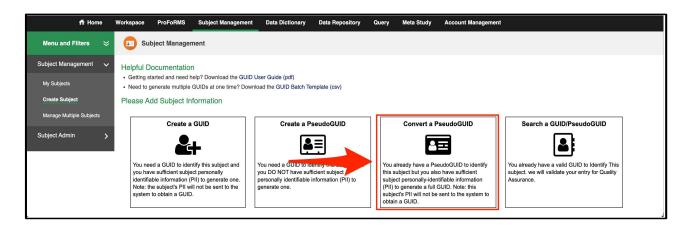
6.4.4 Converting Pseudo GUIDs to valid GUID

To Convert a Pseudo-GUID to valid GUID: Perform the following actions:

1. Navigate to the Create Subject page (Refer to 6.4.1 steps 1-2).

| ff Home | Workspace ProFoRMS | Subject Management | Data Dictionary | Data Repository | Query | Meta Study | Account Management | | |
|-----------------------------------|--------------------------------|---------------------------------|-----------------|-----------------|-------------|-----------------|------------------------|-----------------|-------------------------|
| Menu and Filters $~~$ $\gtrsim~~$ | Subject Manage | ment | | | | | | | |
| Subject Management 🗸 | Subject Manage | ment Tool | | | | | | | |
| My Subjects Create Subject | Add Subject Add Multiple : | Subjects Download Mine | e Only ~ All | ~ | | | | Search: ▼ | |
| | ID | 🜲 ТҮРЕ | \$ EN | тітү 🔶 | ORGANIZATIO | ON REGISTERED B | Y 🝦 USER REGISTERED BY | DATE REGISTERED | LINKED TO |
| Manage Multiple Subjects | TBIDEMOKB275ZR0 | GUID | FI | TBIR | BRICS | | Rutherford, John | 2022-05-11 | |
| Subject Admin > | Showing 1 to 1 of 1 entries (f | iltered from 2,388 total entrie | s) | | | | | Fi | st Previous 1 Next Last |

2. Select the Convert a PseudoGUID option.





3. The **Convert Pseudo GUID to GUID** dialog box appears. Fill in the **Input Pseudo GUID ID** field with your pseudo GUID ID then fill out the rest of the required information.

4. Click Convert Pseudo GUID button

| Subject Management My Subjects Getting started and need help? Download the GUID User Guide (pdf) Need to generate multiple GUIDs at one time? Download the GUID Bach Template (csv) Subject Admin Metage Multiple Stubjects Subject Admin Persued GUID ID Complete legal given (first) name of the subject at birth Complete legal given (first) name of subject at birth Complete legal given (first) name of subject at birth Complete legal first) Mont of Birth Complete legal first) Mont of Birth Subject at birth (151) Name of citymunicipality in which subject at birth Subject at birth (161) Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Complete additional (fild): Physical exc of subject at birth (MFF) Comment issued or National ID Complete additional (fild): Physical exc of subject at birth (MFF) Scomment issued or National ID Complete additional (fild): | Menu and Filters $~~lpha$ | Subject Management | | | | | | | |
|--|---------------------------|---|---|---|--|--|--|--|--|
| Subject Admin Required Fields Please Enter Subject's Information (PII) Please Confirm (Re-Enter) the Subject's Information 1. Complete legal gravity (first) name of the subject at birth 1 TBIDEMO_INVTE 119KL2 Peeudo 2. Does the subject have a middle name? No ~ Peeudo No ~ 3. Complete legal gravity (list) name of subject at birth LastName LastName LastName LastName 1 | My Subjects | Getting started and need help? Download the GUID User Guide (pdf) Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) | | | | | | | |
| GUID | | Required Fields Input Pseudo GUID ID 1. Complete legal given (first) name of the subject at birth 2. Does the subject have a middle name? 3. Complete legal family (last) name of subject at birth 4. Complete legal family (last) name of subject at birth 5. Month of Birth 7. Year of Birth 8. Name of city/municipality in which subject was born 9. Country of Birth Optional Fields 10. Physical sex of subject at birth [M/F] 11. Government Issued or National ID | TEIDEMO_INVTE119KL2 Pseudo No LastName 1 January 1970 Test UNITED STATES OF AMERICA (THE) | TBIDEMO_INVTE119KL2 Pseudo No LastName 1 January 1970 Test UNITED STATES OF AMERICA (THE) | | | | | |

5. The **GUID** generation dialog window appears with the newly converted GUID. Click **Copy** to copy the GUID or **OK** to close the dialog box.

| GUID Tool | Create GUIDs In order to protect the privacy of study participants, the GUID tool is run locally. By selecting the link below, the GUID tool will be downloaded an tool requires a version of Java to be installed generative computer. |
|---------------|---|
| GUID Overview | Helpful Documentation GUID Generation Successful |
| Create GUIDs | Getting started and need help? Downlo New GUID: TBIVE258DBBVE |
| My GUIDs | Need to generate multiple GUIDs at on |
| | Functions About |



<u>NOTE</u>: If you accidentally click **OK** and close the **GUID Generation Successful** dialog box, you can reference and/or copy the generated GUID from the GUID Client. The newly generated GUID will appear in the **GUID** field and can be copied using the **Copy GUID** button.

| Menu and Filters $ightarrow$ | Subject Management | | | | | | | |
|------------------------------|---|---|---|--|--|--|--|--|
| Subject Management 🗸 🗸 | Helpful Documentation | | | | | | | |
| My Subjects | Getting started and need help? Download the GUID User Guide (pdf) Need to generate multiple GUIDs at one time? Download the GUID Batch Template (csv) | | | | | | | |
| Create Subject | Please Add Subject Information | | | | | | | |
| Manage Multiple Subjects | RETURN TO GUID OPTIONS | | | | | | | |
| Subject Admin > | Required Fields | Please Enter Subject's Information (PII) | Please Confirm (Re-Enter) the Subject's Information | | | | | |
| ~ ~ | Input Pseudo GUID ID | TBIDEMO_INVTE119KL2 | TBIDEMO_INVTE119KL2 | | | | | |
| | 1. Complete legal given (first) name of the subject at birth | Pseudo | Pseudo | | | | | |
| | Does the subject have a middle name? | No | No | | | | | |
| | 3. Complete additional (middle) name or names at birth | | | | | | | |
| | 4. Complete legal family (last) name of subject at birth | LastName | LastName | | | | | |
| | 5. Day of birth [1-31] | 1 | 1 | | | | | |
| | 6. Month of Birth | January | January | | | | | |
| | 7. Year of Birth [####] | 1970 | 1970 | | | | | |
| | 8. Name of city/municipality in which subject was born | Test | Test | | | | | |
| | 9. Country of Birth | UNITED STATES OF AMERICA (THE) | UNITED STATES OF AMERICA (THE) | | | | | |
| | Optional Fields | | | | | | | |
| | 10. Physical sex of subject at birth [M/F] | Male ~ | Male | | | | | |
| | 11. Government Issued or National ID | | | | | | | |
| | 12. Country Issuing Government-Issued or National ID | V | ~ | | | | | |
| | GUID TBIDEMOUH009RLF | | | | | | | |
| | Convert Pse | eudo GUID Copy GUID Copy GUID and PII Clear/New | | | | | | |
| | | | | | | | | |
| | GUID: * TBIDEMOUH009RLF | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



6.4.5 My Subjects/GUIDs

To View My Subjects/GUIDs: Perform the following actions:

- 1. Open the Subject Management from the workspace and it will load the My Subjects page
- **2.** Here you can use the search box to filter your subjects. Select the fields in which you would like to filter (by default all will be selected) and type your search into the search box. Your results will filter as you type.

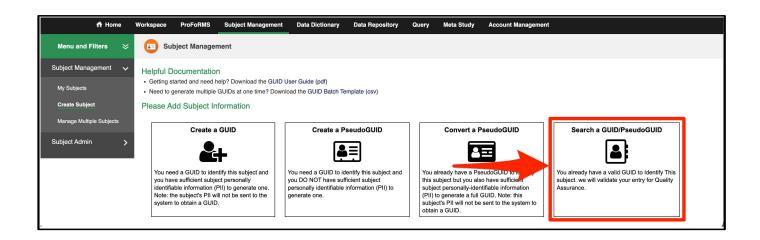
| 📅 Home | Workspace ProFoRMS | Subject Management Data Diction | ary Data Repository | Query Meta Study | Account Managemen | t | |
|-------------------------------|---------------------------------|----------------------------------|---------------------|--------------------------------|-----------------------|-----------------|---|
| Menu and Filters $~~lpha$ | Subject Manager | ment | | | | | |
| Subject Management 🗸 | Subject Manager | ment Tool | | | | | |
| My Subjects Create Subject | Add Subject Add Multiple 5 | Subjects Download | | | | 1 | Search: 👻 |
| Manage Multiple Subjects | ID | 🔶 ТҮРЕ | \$ ENTITY | ORGANIZATION REGISTERED BY | USER REGISTERED BY | DATE REGISTERED | |
| manage manaple eabjeets | TBIDEMOKB275ZR0 | GUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | ORGANIZATION REGISTERED BY USER REGISTERED BY |
| Subject Admin > | TBIDEMOUR081KDB | GUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | DATE REGISTERED INKED TO |
| | TBIDEMOFD007MKE | GUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | |
| | TBIDEMOXJ179YK5 | GUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | |
| | TBIDEMO_INVTE119KL2 | PseudoGUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | TBIDEMOUH009RLF |
| | TBIDEMO INVFK004JWH | PseudoGUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | |
| | | GUID | FITBIR | BRICS | Rutherford, John | 2022-05-11 | TBIDEMO_INVTE119KL2 |
| | Showing 1 to 7 of 7 entries (fi | Itered from 2,395 total entries) | | | | | First Previous 1 Next Las |



6.4.6 Searching if Subject/GUID (or Pseudo GUID) Exists

To Check if a GUID (or Pseudo GUID) already exists: Perform the following actions:

1. Navigate to the Create Subject page (Refer to 6.4.1 steps 1-2). Select Search GUID/ PseudoGUID as shown below.



2. The **Check if GUID Exists on the Server** dialog box appears. Enter the GUID or Pseudo GUID in the GUID/PseudoGUID field, and click the **Check** button. The result appears in the Result field.

| GUID Tool | Create GUIDs In order to protect the privacy of study particip | Check if GUID Ex | ists | × |
|--------------------------|---|------------------|--|-------|
| GUID Overview | Helpful Documentation Getting started and need help? Downlo | | PseudoGUID you want to check: TBIHJ226FYKXZ | check |
| Create GUIDs My GUIDs | Need to generate multiple GUIDs at on Functions About | Result: | The GUID TBIHJ226FYKXZ doesn't exi | ist. |
| | Required Fields 1 Complete legal given (first) name of the se | augu u una | | Close |



6.5 Accessing the Multi-Tenant GUID Server

Researchers participating in the Multi-Tenant GUID server who want access to another Entity's GUIDs, need to initiate a request through the Entity's Accounts Module. Please contact a member of your designated Operations team for additional details.

6.6 APPENDIX 6A – COUNTRY CODES

| Country | Country Code |
|--------------------------------|--------------|
| UNITED STATES | US |
| AFGHANISTAN | AF |
| ÅLAND ISLANDS | AX |
| ALBANIA | AL |
| ALGERIA | DZ |
| AMERICAN SAMOA | AS |
| ANDORRA | AD |
| ANGOLA | AO |
| ANGUILLA | AI |
| ANTARCTICA | AQ |
| ANTIGUA AND BARBUDA | AG |
| ARGENTINA | AR |
| ARMENIA | AM |
| ARUBA | AW |
| AUSTRALIA | AU |
| AUSTRIA | AT |
| AZERBAIJAN | AZ |
| BAHAMAS | BS |
| BAHRAIN | BH |
| BANGLADESH | BD |
| BARBADOS | BB |
| BELARUS | ВҮ |
| BELGIUM | BE |
| BELIZE | BZ |
| BENIN | BJ |
| BERMUDA | BM |
| BHUTAN | ВТ |
| BOLIVIA | во |
| BONAIRE, SINT EUSTATIUS, SABA | BQ |
| BOSNIA AND HERZEGOVINA | ВА |
| BOTSWANA | BW |
| BOUVET ISLAND | BV |
| BRAZIL | BR |
| BRITISH INDIAN OCEAN TERRITORY | Ю |
| BRUNEI DARUSSALAM | BN |
| BULGARIA | BG |



| Country | Country Code |
|---------------------------------------|--------------|
| BURKINA FASO | BF |
| BURUNDI | BI |
| CAMBODIA | КН |
| CAMEROON | СМ |
| CANADA | СА |
| CAPE VERDE | CV |
| CAYMAN ISLANDS | КҮ |
| CENTRAL AFRICAN REPUBLIC | CF |
| CHAD | TD |
| CHILE | CL |
| CHINA | CN |
| CHRISTMAS ISLAND | СХ |
| COCOS (KEELING) ISLANDS | СС |
| COLOMBIA | СО |
| COMOROS | КМ |
| CONGO | CG |
| CONGO, THE DEMOCRATIC REPUBLIC OF THE | CD |
| COOK ISLANDS | СК |
| COSTA RICA | CR |
| CÔTE D'IVOIRE | CI |
| CROATIA | HR |
| CUBA | CU |
| CYPRUS | CY |
| CZECH REPUBLIC | CZ |
| DENMARK | DK |
| DJIBOUTI | DJ |
| DOMINICA | DM |
| DOMINICAN REPUBLIC | DO |
| ECUADOR | EC |
| EGYPT | EG |
| EL SALVADOR | SV |
| EQUATORIAL GUINEA | GQ |
| ERITREA | ER |
| ESTONIA | EE |
| ETHIOPIA | ET |
| FALKLAND ISLANDS (MALVINAS) | FK |
| FAROE ISLANDS | FO |
| FIJI | FJ |



| Country | Country Code |
|-----------------------------------|--------------|
| FINLAND | FI |
| FRANCE | FR |
| FRENCH GUIANA | GF |
| FRENCH POLYNESIA | PF |
| FRENCH SOUTHERN TERRITORIES | TF |
| GABON | GA |
| GAMBIA | GM |
| GEORGIA | GE |
| GERMANY | DE |
| GHANA | GH |
| GIBRALTAR | GI |
| GREECE | GR |
| GREENLAND | GL |
| GRENADA | GD |
| GUADELOUPE | GP |
| GUAM | GU |
| GUATEMALA | GT |
| GUERNSEY | GG |
| GUINEA | GN |
| GUINEA-BISSAU | GW |
| GUYANA | GY |
| HAITI | HT |
| HEARD ISLAND AND MCDONALD ISLANDS | HM |
| HOLY SEE (VATICAN CITY STATE) | VA |
| HONDURAS | HN |
| HONG KONG | НК |
| HUNGARY | HU |
| ICELAND | IS |
| INDIA | IN |
| INDONESIA | ID |
| IRAN, ISLAMIC REPUBLIC OF | IR |
| IRAQ | IQ |
| IRELAND | IE |
| ISLE OF MAN | IM |
| ISRAEL | IL |
| ITALY | IT |
| JAMAICA | JM |



| Country | Country Code |
|--|--------------|
| JAPAN | JP |
| JERSEY | JE |
| JORDAN | OL |
| KAZAKHSTAN | КΖ |
| KENYA | КЕ |
| KIRIBATI | КІ |
| KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF | КР |
| KOREA, REPUBLIC OF | KR |
| KOSOVO | ХК |
| KUWAIT | KW |
| KYRGYZSTAN | KG |
| LAO PEOPLE'S DEMOCRATIC REPUBLIC | LA |
| LATVIA | LV |
| LEBANON | LB |
| LESOTHO | LS |
| LIBERIA | LR |
| LIBYAN ARAB JAMAHIRIYA | LY |
| LIECHTENSTEIN | LI |
| LITHUANIA | LT |
| LUXEMBOURG | LU |
| MACAO | МО |
| MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF | МК |
| MADAGASCAR | MG |
| MALAWI | MW |
| MALAYSIA | MY |
| MALDIVES | MV |
| MALI | ML |
| MALTA | MT |
| MARSHALL ISLANDS | МН |
| MARTINIQUE | MQ |
| MAURITANIA | MR |
| MAURITIUS | MU |
| MAYOTTE | YT |
| MEXICO | MX |
| MICRONESIA, FEDERATED STATES OF | FM |
| MOLDOVA, REPUBLIC OF | MD |
| MONACO | MC |
| MONGOLIA | MN |



| Country | Country Code |
|---------------------------------|--------------|
| MONTENEGRO | ME |
| MONTSERRAT | MS |
| MOROCCO | MA |
| MOZAMBIQUE | MZ |
| MYANMAR | MM |
| NAMIBIA | NA |
| NAURU | NR |
| NEPAL | NP |
| NETHERLANDS | NL |
| NETHERLANDS ANTILLES | AN |
| NEW CALEDONIA | NC |
| NEW ZEALAND | NZ |
| NICARAGUA | NI |
| NIGER | NE |
| NIGERIA | NG |
| NIUE | NU |
| NORFOLK ISLAND | NF |
| NORTHERN MARIANA ISLANDS | MP |
| NORWAY | NO |
| OMAN | OM |
| PAKISTAN | РК |
| PALAU | PW |
| PALESTINIAN TERRITORY, OCCUPIED | PS |
| PANAMA | РА |
| PAPUA NEW GUINEA | PG |
| PARAGUAY | РҮ |
| PERU | PE |
| PHILIPPINES | РН |
| PITCAIRN | PN |
| POLAND | PL |
| PORTUGAL | РТ |
| PUERTO RICO | PR |
| RÉUNION | RE |
| ROMANIA | RO |
| RUSSIAN FEDERATION | RU |
| RWANDA | RW |
| SAINT BARTHÉLEMY | BL |



| Country | Country Code |
|--|--------------|
| SAINT HELENA | SH |
| SAINT KITTS AND NEVIS | KN |
| SAINT LUCIA | LC |
| SAINT MARTIN | MF |
| SAINT PIERRE AND MIQUELON | PM |
| SAINT VINCENT AND THE GRENADINES | VC |
| SAMOA | WS |
| SAN MARINO | SM |
| SAO TOME AND PRINCIPE | ST |
| SAUDI ARABIA | SA |
| SENEGAL | SN |
| SERBIA | RS |
| SEYCHELLES | SC |
| SIERRA LEONE | SL |
| SINGAPORE | SG |
| SLOVAKIA | SK |
| SLOVENIA | SI |
| SOLOMON ISLANDS | SB |
| SOMALIA | SO |
| SOUTH AFRICA | ZA |
| SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS | GS |
| SPAIN | ES |
| SRI LANKA | LK |
| SUDAN | SD |
| SURINAME | SR |
| SVALBARD AND JAN MAYEN | SJ |
| SWAZILAND | SZ |
| SWEDEN | SE |
| SWITZERLAND | СН |
| SYRIAN ARAB REPUBLIC | SY |
| TAIWAN | TW |
| TAJIKISTAN | LT |
| TANZANIA, UNITED REPUBLIC OF | TZ |
| THAILAND | ТН |
| TIMOR-LESTE | TL |
| TOGO | TG |
| TOKELAU | ТК |



| Country | Country Code |
|--------------------------------------|--------------|
| TONGA | то |
| TRINIDAD AND TOBAGO | ТТ |
| TUNISIA | TN |
| TURKEY | TR |
| TURKMENISTAN | ТМ |
| TURKS AND CAICOS ISLANDS | TC |
| TUVALU | TV |
| UGANDA | UG |
| UKRAINE | UA |
| UNITED ARAB EMIRATES | AE |
| UNITED KINGDOM | GB |
| UNITED STATES MINOR OUTLYING ISLANDS | UM |
| URUGUAY | UY |
| UZBEKISTAN | UZ |
| VANUATU | VU |
| VATICAN CITY STATE | VA |
| VENEZUELA | VE |
| VIET NAM | VN |
| VIRGIN ISLANDS, BRITISH | VG |
| VIRGIN ISLANDS, U.S. | VI |
| WALLIS AND FUTUNA | WF |
| WESTERN SAHARA | EH |
| YEMEN | YE |
| ZAIRE | CD |
| ZAMBIA | ZM |
| ZIMBABWE | ZW |
| VANUATU | VU |
| VATICAN CITY STATE | VA |
| VENEZUELA | VE |
| VIET NAM | VN |
| VIRGIN ISLANDS, BRITISH | VG |
| VIRGIN ISLANDS, U.S. | VI |
| WALLIS AND FUTUNA | WF |
| WESTERN SAHARA | EH |
| YEMEN | YE |
| ZAIRE | CD |
| ZAMBIA | ZM |
| ZIMBABWE | ZW |

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