

TnC User Identification Rules-v2 Tap-n-Chat

1.0 Background

Using Country Code Along with Mobile Number

In order to uniquely identify a TnC user across various countries, we need to add the registered user's country code as a prefix. Hence, Tap-n-Chat will use 10 digit mobile number and user's 3 digit country code to uniquely identify a registered user. When user registers the App, server will use the registration verification message to get the user's country code and the mobile number.

A list of country codes as a separate Excel document is provided as a reference.

E.g.: USA = 1, India = 91, Bangladesh = 880

About IDD Code or International Dialing Codes (Prefixes)

An international dialing code (or prefix) is used to make an international phone call out of a country. These codes are also referred to as international access codes, international direct dialing (IDD) codes and exit codes.

In Australia the IDD code is 0011 for voice calls, in the U.S. it is 011 and in the UK it is 00. The codes vary from country to country. Three example calls are given below.

Example call from Australia to the UK: 0011 (Australian IDD code) + 44 (UK) + 7651 123 123 (mobile number without the 0)

Example call from the U.S. to Sydney, Australia: 011 (U.S. IDD code) + 61 (Australia) + 2 (Sydney) 8765 1234 (local number)

Example call from the UK to Sydney, Australia: 00 (UK IDD code) + 61 (Australia) + 2 (Sydney) 8765 1234 (local number)

So basically, to make a call out of a country, the caller must first dial that country's IDD code, then the destination country code, then the area code (usually) and the local phone number. If the call is to a mobile number, no area code is used.

2.0 Identification of Tap-n-Chat Users From Phone Contact List

Before beginning to determine if a number belongs to a TnC user, remove all non-number characters (+,-,(),space,comma,semicolon) from the contact phone number.

- a) <u>0-2 Digit Numbers</u>: These are invalid numbers.
- b) 3-9 Digit Numbers: Since most of these are landlines and special emergency #s, the App will store them as it is in the contact tile. User will not be able to request an image for these numbers.

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- Name: Contact Name
- Phone #: Contact Phone #
- Is Mobile # Flag: FALSE
- International Access Code Flag: FALSE
- International Access Code: N/A
- c) 10 Digit Numbers: Using registered user's country code as the default, check the number against registered TnC user DB. If match found, populate contact fields as follows:
 - Name: Contact Name
 - Phone #: 10 Digit Phone #
 - Is Mobile # Flag: TRUE
 - International Access Code Flag: FALSE
 - International Access Code: N/A

Tag it as TnC user

If no match found, populate contact fields as follows:

- Name: Contact Name
- Phone #: Contact Phone #
- Is Mobile # Flag: FALSE
- International Access Code Flag: FALSE
- International Access Code: N/A
- d) 11 Digit Numbers: It is possible many US-based users might have a 1 in front of the 10 digit mobile #. Hence, remove this first digit, number. Using the registered user's country code as the default, check the number against registered TnC user DB. If match found, populate contact field as follows:
 - Name: Contact Name
 - Phone #: 10 Digit Phone #
 - Is Mobile # Flag: TRUE
 - International Access Code Flag: FALSE
 - International Access Code: N/A

Tag it as TnC user

If no match found, populate contact fields as follows:

- Name: Contact Name
- Phone #: Contact Phone #
- **Is Mobile # Flag**: FALSE
- International Access Code Flag: FALSE
- International Access Code: N/A
- e) 10+ Digit Numbers: These are usually international numbers or specially formatted numbers to direct dial a conference bridge number, etc. Following steps will help determine if this is a TnC user.

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Step1: Determine if this is an international number. The first few characters are tested against registered user's IDD (International Exit Number). The country code document contains the IDD numbers for each country. These are 1 to 4 digits long. For example, IDD for US is 011. IDD for India 00 & IDD for Taiwan is 00x. If user is from US, these numbers will start with 011. For India based users, the number will start with 00. In Taiwan it will have 3 digits of the form 00x (x – indicating carrier specific code). If a match is found, go to step 2. Else, this is not a TnC user.

• Name: Contact Name

• **Phone #**: Contact Phone # in its original form

• Is Mobile # Flag: FALSE

International Access Code Flag: FALSE

• International Access Code: N/A

Step2: Determine Country Code. Separate the IDD from the number string. If the length of remaining part is less than 11, this is not a well formed number and it cannot be a TnC user. Hence, Goto Step 4. If the remaining part is greater than 10, take the last 10 characters. Save this as the potential mobile number. Now the remaining number could be country code. Check it against the country code table for a match. If match found, go to Step 3. Else, this is not a TnC user. GoTo Step 4.

- f) **Step3: Check for TnC User**. From step 2, we have a country code and a 10 digit potential mobile number. Check this against the list of registered TnC user. If match found, populate contact field as follows:
 - Name: Contact Name
 - Phone #: 10 Digit Phone #
 - Is Mobile # Flag: TRUE
 - International Access Code Flag: TRUE
 - International Access Code: IDD<space>Country Code

Tag it as TnC user

If no match found, populate contact fields as follows:

- Name: Contact Name
- Phone #: Contact Phone #
- Is Mobile # Flag: TRUE
- International Access Code Flag: TRUE
- International Access Code: IDD<space>Country Code

Step4: From step 2, we have a international number without a valid or unsupported country code. Hence, populate contact field as follows:

- Name: Contact Name
- Phone #: Contact Phone # without IDD prefix

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- Is Mobile # Flag: FALSE
- International Access Code Flag: TRUE
- International Access Code: IDD<space>Country Code (if applicable)

2.1 Identification of Tap-n-Chat Users While Creating New Contact

While creating a contact, user's will provide data for the following fields:

- Name: Contact Name
- **Phone #**: Contact Phone # without IDD prefix
- Is Mobile # Flag:
- International Access Code Flag:
- International Access Code:
- a) <u>0-2 Digit Numbers</u>: These are invalid numbers.
- b) <u>3-9 Digit Numbers</u>: These are not mobile numbers. Hence, we can skip the TnC check
- c) <u>10 Digit Numbers Without International Code</u>: Using user's country code as default, check the number against registered TnC user DB. If match found, then this is a TnC user.
- d) <u>9+ Digit Numbers With or Without International Code</u>: Combine the phone number with international codes (if applicable). If the resulting length is 11, follow rules of Step (d). If more than 11, follow rules of Step (e) from previous section.

3.0 Choose Button Image

From the previous step, if the Mobile Flag is FALSE, then the 'Request From Contact' option will not be available for this contact. It will be grayed-out (inactive).

If this is a TnC user, then the request for image goes via push notification. Else, we can use user's SMS gateway.