**Testing Plan:**

Integration Name: TwitterSOARx

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Test Items:

* twitter-get-users command (and all associated arguments)
  + name
  + page
  + count
* twitter-get-user-info command (and all associated arguments)
  + usernames
* twitter-get-tweets command (and all associated arguments)
  + q
  + lang
  + result\_type
  + from\_user
  + to\_user
  + geocode
  + count

Approach:

Test each combination of command inputs a minimum of 5 times by entering different inputs given the combination being tested (i.e when testing the combination of q, lang, and geocode, entering different q, lang, and geocode values each time). Inputs will also include arguments that are not optimal for searching to test the integration’s capabilities of returning empty results. Details about whether the output passed expectations, and any comments will be noted after each command input.

Scope:

The scope of the test plan is all of the TwitterSOARx commands and their associated arguments. How the commands interact with XSOAR is also within the scope of this plan. The creation of the GET request to Twitter, API call to Tweepy and the manipulation of the data received from Twitter and Tweepy is also within the scope of this plan. The data received from Twitter and Tweepy is not within the scope of this plan.

Item pass/fail criteria:

* Pass Criteria:
  + Output’s contents are reflective of the search arguments given.
  + Output does not result in an error, or results in an intentional error from a return\_error statement
* Fail Criteria:
  + Output returns an error message not from the return\_error function
    - Minus an empty search like q=” “, as that is far to vague for twitter to return a response
    - Minus searching for a user that does not exist in the twitter-get-user-info command
  + Output contents are not reflective of search arguments given.

Suspension Criteria & Resumption Requirements:

* Suspension Criteria:
  + A bug is discovered that causes results to be incorrectly displayed
* Resumption Criteria:
  + The bug that caused the issues is resolved; or an appropriate plan of remediation is set.

Discovered Issues:

1. Highlighting appears in parts of some links in XSOAR
2. ^^^ appears in some tables in XSOAR

The integration code has been searched line by line and it has been determined that the errors are being caused by something outside of TwitterSOARx. A formal bug report is being sent to the dev team describing the issue.

Tests performed below:

Format:

* Command Entered
  + Output as Expected?
    - Description if necessary

**Twitter-get-user-info:**

1. !twitter-get-user-info usernames="PaloAltoNtwks"
   1. Output meets search parameters
2. !twitter-get-user-info usernames="nikesharora"
   1. Output meets search parameters
3. !twitter-get-user-info usernames="walmart"
   1. Output meets search parameters
4. !twitter-get-user-info usernames="walmart,PaloAltoNtwks,Nintendo,target"
   1. Output meets search parameters
5. !twitter-get-user-info usernames="walmart,PaloAltoNtks,Nintendo,target"
   1. Output meets search parameters
      1. Note: PaloAltoNtks does not appear in the output table as no account exists called “PaloAltoNtks”, the command does not result in an error, it just skips the account that does not exist
6. !twitter-get-user-info usernames=”woqehoiefwhiehdohs”
   1. Output results in an error as no account associated with the username exists, and the returned json is empty.

**Twitter-get-users:**

1. !twitter-get-users name="Palo Alto Networks" count=100
   1. Output meets search parameters
      1. Only returns 20 accounts as 20 is the max twitter will return
2. !twitter-get-users name="Palo Alto Networks" page=3
   1. Output meets search parameters
3. !twitter-get-users name="target”
   1. Output meets search parameters
4. !twitter-get-users name=”test”
   1. Output meets search parameters
5. !twitter-get-users name="Golden Sun” page=2
   1. Output meets search parameters
6. !twitter-get-users name="Pokemon" count=1
   1. Output meets search parameters
7. !twitter-get-users name="Demisto" count=13
   1. Output meets search parameters
8. !twitter-get-users name="demsito" count=8 page=2
   1. Output meets search parameters
      1. Output contains accounts that appeared in page 1, due to a lack of overall accounts meeting the search criteria.
9. !twitter-get-users name="Nintendo" count=19 page=2
   1. Output meets search parameters
10. !twitter-get-users name="cisco" count=19 page=2
    1. Output meets search parameters

**Twitter-get-tweets:**

1. !twitter-get-tweets q="Palo Alto Networks"
   1. Output meets search parameters
2. !twitter-get-tweets q="gOLDen sUN dARK dAWN"
   1. Output meets search parameters
      1. Not case sensitive
3. !twitter-get-tweets q="XSOAR"
   1. Output meets search parameters
4. !twitter-get-tweets q="Nintendo"
   1. Output meets search parameters
5. !twitter-get-tweets q="Cyber Security"
   1. Output meets search parameters
      1. Note: Some tweets returned included the word “cyber” and then further into the tweet the word “security”
6. !twitter-get-tweets q="Cyber Security" lang=ru
   1. Output meets search parameters
      1. Search results returned 5 matches, all were in Russian. 3 of the results contained the english words or hashtag “CyberSecurity”, 1 contained a shortened link that the expanded link contained the english word “cyber-security”, and 1 was completely in Russian and when translated to English contained the word “cyber security”
7. !twitter-get-tweets q=” “ lang=en
   1. ERROR 400
      1. Search results likely failed as the search equates to “Return the most popular and recent tweets that are in english”, which is likely too vague for Twitter.
      2. Error:

Exception: Request returned an error: 400 {"errors":[{"code":25,"message":"Query parameters are missing."}]}

1. !twitter-get-tweets q="Hack" lang="bn"
   1. Output meets search parameters
2. !twitter-get-tweets q="icecream" lang=el
   1. Output meets search parameters
3. !twitter-get-tweets q="water" lang=pl
   1. Output meets search parameters
4. !twitter-get-tweets q="hi" result\_type="popular"
   1. Output meets parameters
5. !twitter-get-tweets q="hi" result\_type="recent"
   1. Output meets parameters
6. !twitter-get-tweets q="Hack" include\_entities="True" result\_type=popular
   1. Output meets parameters
7. !twitter-get-tweets q=" " count="70" include\_entities="True" from\_user="Nintendo”
   1. Output meets parameters
8. !twitter-get-tweets q=" " count="70" include\_entities="True" from\_user="PaloAltoNtwks"
   1. Output meets parameters
9. !twitter-get-tweets q=" " count="70" include\_entities="True" from\_user="Unit42\_Intel"
   1. Output meets parameters
10. !twitter-get-tweets q=" " count="70" include\_entities="True" from\_user="Walmart" result\_type=”popular”
    1. Output meets parameters
11. !twitter-get-tweets q="Cyber" include\_entities="True" result\_type=popular
    1. Output meets parameters
12. !twitter-get-tweets q="Cyber" geocode="37.383266,-121.983840,800mi"
    1. Output meets parameters
13. !twitter-get-tweets q=" " geocode="41.383266,-100.977740,800mi"
    1. Output meets parameters
14. !twitter-get-tweets q=" " to\_user="PaloAltoNtwks"
    1. Output meets parameters
15. !twitter-get-tweets q=" " geocode="41.383266,-100.977740,800mi"
    1. Output meets parameters
16. !twitter-get-tweets q=" " from\_user="Nintendo"
    1. Output meets search parameters
17. !twitter-get-tweets q="firewall" from\_user="PaloAltoNtwks"
    1. Output meets search parameters
18. !twitter-get-tweets q="internet" from\_user="Cisco"