



# Client XXXX - Chatbot Integration walkthroughs

Version	Date	Author	Comment
1.3	26/07/19	WAC	Finalized generic version
1.0	09/11/18	WAC	Initial version
0.1	08/11/18	WAC	Initial version



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### RC Engage Digital console setup

- PLATFORM : Client XXXX
- Handover categories
  - BOT CATEGORY ID: XXXXXXXX
    - No human agent has this category / skill and cannot answer to the threads categorized as BOT
  - AGENT CATEGORY ID: XXXXXXXX
    - All human agents needing to answer customer messages after the chatbot will have this category / skill so they can answer the messages following the handover from the bot to the agents
- API ACCESS TOKEN: XXXXXXXX
- DIMELO SOURCE ID: XXXXXXXX
- TRIGGER ID (required for 24/7 chatbot on RCED Chat): XXXXXXXX

If you want Users to test, you would need to give them permissions over the concerned source (at least READ and REPLY) and give them the "AGENT" skill / category.



As a console admin, you can invite new agents on your platform by putting their mail address and some basic contact details.



The source will need to be in a topology where the "anyone" step is at 0. If not, agents will receive BOT messages once a BOT task reaches this step.

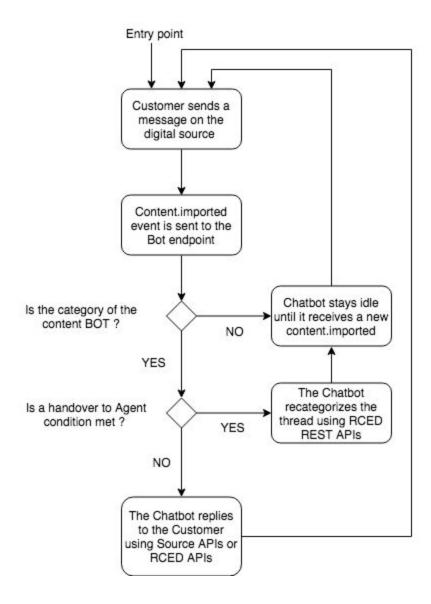


If you want the Chatbot to be working 24/7 on the RCED Chat source, you will have to manually execute a trigger to make the chat available even if no human agents is connected and available (see Appendix for more details)



# Full API chatbot integration (works for any RingCentral **Engage Digital source)**

#### Standard Flow and principle





#### Walkthrough

- Customer contacts the brand on any Bot connected source
- RC Engage Digital receives the Customer Message on the source
- The first Customer Message is automatically categorized by RC Engage Digital as BOT by the Source default categorization. The handover and request processing will be based on the content category.
- The Bot or proxy app receives a Webhook event content.imported with the following payload

```
"id": "1e047f0fc947a3da736a65b2",
"domain_id": "582af25a799fc247acfcde38",
"events": [
{
  "type": "content.imported",
  "id": "5be5aeffe203116daf064709",
  "issued at": "2018-11-09T15:59:59.770Z",
  "resource":
     "type": "chat/message",
    "id": "5be5aeffd6cb009bde8e56e2", // the message ID in RC Engage Digital
    "metadata":
       "approval required": false,
       "author id": "5b8eaf1813047d298f940265",
       "body": "I don't know",
       "body_input_format": "text",
       "creator id": nil,
       "date": "2018-11-09",
       "first_in_thread": true,
       "foreign_categories": [],
       "category ids": [
           "5bdcb766799fc227748f4453", //Other existing category
           "5be59e0a13047d01f46caa62" //BOT Category
       "foreign id": "223cea8921c616e560b24d1f",
       "has attachment": false,
       "intervention id": nil,
       "in reply to author id": nil,
```



```
"in_reply_to_id": nil,
    "language": "fr",
    "source_id": "5b3b6562d6cb00f93fe59c9f",
    "status": "assigned",
    "thread_id": "5be5ae57d6cb009bde8e5674",
    "thread_title": "salut",
    "created_from": "synchronizer",
    "private": true
    }
}
}
```

- [Optional, in case you want more accurate statistics about the Bot processing] The Bot opens an intervention (required if you want to send survey after the intervention is closed for a BOT Only processing) using RC Engage Digital REST API
  - HTTP POST Call to https://PLATFORM.api.engagement.dimelo.com/1.0/interventions?access\_token
     =API\_ACCESS\_TOKEN with the following parameter:
    - Content\_id: The message ID in RC Engage Digital (in green in the content.imported payload)
- The answer payload will look like :

```
{
       "id": "3f55c8330da4144afd1c6728", // Intervention technical ID that will be
       necessary to close it aftrewards
       "created at": "2012-05-21T01:15:28Z",
       "updated at": "2012-05-21T01:19:49Z",
       "source_id": "f18c81948c137d86dac77216",
       "thread id": "9c9903dc3d559a8801eb5441",
       "content id": "c93e3586250ff60181b6c2f0",
       "deferred_at": "2012-05-21T01:18:49Z",
       "identity id": "8a8deed44623a4c44268c266",
       "comments count": 1,
       "closed": false,
       "closed_at": "2012-05-24T02:00:32Z",
       "custom_fields": {
              "external id": "342901"
       },
       "category_ids: ["4d0fb475b242228032cbdf6d", "59248c4dae276a021cb296d2"],
```



```
"user id": "d033e22ae348feb5660fc214",
       "user replies count": 1,
       "user reply in average": 84959,
       "user_reply_in_average_bh": 63000,
       "user_reply_in_average_count": 1,
       "first_user_reply_id": "573446514379728247000001",
       "first user reply in": 0,
       "first_user_reply_in_bh": 0,
       "last_user_reply_in": 0,
       "last user reply in bh": 0,
       "status": "Fermée"
}
```



Opening the intervention is only necessary for customer messages without intervention\_id ("intervention\_id": nil) and first in thread ("first\_in\_thread": true).

- The Bot posts its answer using RC Engage Digital REST API
  - o HTTP POST Call to https://PLATFORM.api.engagement.dimelo.com/1.0/contents?access\_token=API ACCESS TOKEN with the following parameters:
    - author id: The identity id of content. This parameter is not mandatory, by default it use the token's user first identity on source.
    - body: The content's body. This parameter is mandatory.
    - in reply to id: The content's id you want to reply to. If omitted, a new discussion will be created. If source does not support to initiate discussion this parameter is mandatory.
    - private: Created contents are public by default, set this parameter to "1" in order to create a private reply.
    - source\_id: The source to create content to. If you specify in\_reply\_to\_id parameter, source will be determined from. Otherwise, this parameter is mandatory.
- Example : curl -X POST -d "source\_id=5b3b6562d6cb00f93fe59c9f&in\_reply\_to\_id=5be5aeffd6cb009bde8e56e2 &body="Bot Answer to the Customer message" "https://PLATFORM.api.engagement.dimelo.com/1.0/contents?access token=API A CCESS TOKEN"
- RC Engage Digital posts the message automatically on the concerned Digital source





You can also use the source available APIs (ex: Messenger) if you want to use some source specific features that only native APIs provide. Please note that in this case you will receive a content.imported event for every content created this way.

 Repeat previous steps until a handover condition from Bot to Agent is met or the Bot has successfully processed the customers' requests.



You can create and close Interventions using the RC Engage Digital REST API to get more accurate statistics about requests processed by the chatbot

#### Case 1: The Bot has successfully processed the customer request

- [Optional, in case you want more accurate statistics about the Bot processing] The bot closes the intervention previously opened via REST API.
  - HTTP PUT request to https://PLATFORM.api.engagement.dimelo.com/1.0/interventions/3f55c8330da4 144afd1c6728/close?access token=API ACCESS TOKEN
  - Please note that the following has to be verified in order to close an intervention otherwise a 403 will be raised:
    - The Intervention MUST NOT already be closed
    - The Intervention MUST have agent replies (that is why the intervention must be opened before the first BOT message)
    - Access-Token agent MUST be the owner of the intervention or have the permission to edit permissions (as the Bot opened the intervention via REST API, the Bot will be the Intervention owner)
    - Access-Token agent MUST have read access on the source

#### Case 2: A Bot to Agent handover condition is met

#### **Optional: Check for agents availability on realtime channels (eg Dimelo Chat)**

The check for agent availability would be made by the Bot or server side on our REST APIs.



For Security reasons, we recommend that all REST APIs calls are made from the server side.



We have a dedicated endpoint that will give you the agents availabilities by channel.

To get the availability status for all agents, you can perform a HTTP GET call to:

https://PLATFORM.api.engagement.dimelo.com/1.0/status?access\_token=YOUR\_API\_ACCESS \_TOKEN

More info about the call and the associated response in the RingCentral Engage Digital-REST-API p.74 (Get all connected agents status)

You will get the status for each connected agent in TASK mode by channel and you will be able to parse it and act on it.

As a channel may contain several sources and agents' permissions to read/reply content are on sources, you may have to cross reference the result with the agents' permissions on sources that you may also get using the REST APIs.



Please note that API calls are not invoiced below a threshold, but if the number of API calls is above the threshold, you may be contacted by our Sales Team and be asked to purchase an additional API package.



The recommended solution to avoid too much API calls is to keep a centralized file on your side with the agents sources permissions that will be updated every day or so.

The easiest way to get the list of agents having permissions to READ/REPLY on the chat source would be to create a dedicated team or give specific skills to the agents that will answer the customers requests on this particular chat source.



You will have to give this specific team or category to each new agent answering on the RC Engage Digital Chat Source.

Depending of your integration choice to use categories or teams, you will use one of these two calls to get the relevant list of agents:

You will get the list of agents having a particular skill by performing a HTTP GET call to:



https://PLATFORM.api.engagement.dimelo.com/1.0/users?access\_token=YOUR\_API\_ACCESS\_TOKEN&category\_id=CHAT\_CATEGORY\_ID

More info about the call and the associated response in the RingCentral Engage Digital-REST-API p.41 (Getting all users)

If you prefer to go with the team search, you may perform an HTTP GET call to:

https://PLATFORM.api.engagement.dimelo.com/1.0/users?access\_token=YOUR\_API\_ACCESS\_ TOKEN&team\_id=CHAT\_TEAM\_ID

This way, you will be able to get all agents that can write messages on the chat.

#### If agents are available or if the source is considered asynchronous

 The bot or proxy app has the content categories from the content.imported webhook event payload

```
"id": "1e047f0fc947a3da736a65b2",
"domain id": "582af25a799fc247acfcde38",
"events": [
{
  "type": "content.imported",
  "id": "5be5aeffe203116daf064709",
  "issued at": "2018-11-09T15:59:59.770Z",
  "resource":
    "type": "chat/message",
    "id": "5be5aeffd6cb009bde8e56e2", // the message ID in RC Engage Digital
    "metadata":
       "approval required": false,
       "author id": "5b8eaf1813047d298f940265",
       "body": "I don't know",
       "body input format": "text",
       "creator id": nil,
       "date": "2018-11-09",
       "first in thread": true,
       "foreign categories": [],
       "category ids": [
```



#### "5bdcb766799fc227748f4453", //Other existing category

```
"5be59e0a13047d01f46caa62" //BOT Category
         ],
         "foreign_id": "223cea8921c616e560b24d1f",
         "has attachment": false,
         "intervention id": nil,
         "in reply to author id": nil,
         "in_reply_to_id": nil,
         "language": "fr",
         "source_id": "5b3b6562d6cb00f93fe59c9f",
         "status": "assigned",
         "thread_id": "5be5ae57d6cb009bde8e5674",
         "thread title": "salut",
         "created from": "synchronizer",
         "private": true
       }
    }
  }]
}
```

- Now that the bot or proxy app has the existing thread categories, the idea is to change only the Chatbot Handover category from BOT to AGENT
  - The new categories would be all existing ones without the BOT category and with the AGENT category
- The bot or proxy app makes a REST API call using the thread ID in order to update the thread categories and provoke the task dispatch to human agents in Dimelo
  - HTTP PUT request to https://PLATFORM.api.engagement.dimelo.com/1.0/content\_threads/DIMEL O\_THREAD\_ID/update\_categories?access\_token=API\_ACCESS\_TOKEN&thread \_category\_ids[]=EXISTING\_THREAD\_CATEGORY&thread\_category\_ids[]=AGE NT\_CATEGORY
  - In the example, the thread has 3 categories: "5bdcb766799fc227748f4453" (other category) and "5be59e0a13047d01f46caa62" (BOT Handover Category)
  - The new categories would be "5bdcb766799fc227748f4453" (the other existing category) and "5be59e1f13047d026b6ca8af" (AGENT Handover Category)
  - The final recategorization API Call URL would be https://PLATFORM.api.engagement.dimelo.com/1.0/content\_threads/5be1d 047e20311250379c2f6/update\_categories?access\_token=API\_ACCESS\_TOKEN &thread\_category\_ids[]=5bdcb766799fc227748f4453&thread\_category\_ids[]= 5be59e1f13047d026b6ca8af



The answer will look like the following:

```
{
         id: "5be1d047e20311250379c2f6",
         created_at: "2018-11-06T17:32:54Z",
         updated_at: "2018-11-07T09:30:39Z",
         category_ids:
         L
                  "5bdcb766799fc227748f4453",
                  "5bdcba2ed6cb00362663b2b5"
         ],
         closed: false,
         contents_count: 1,
         extra_data: { },
         foreign_id: null,
         interventions_count: 0,
         source_id: "57d6d2b714bf8a83311decc9",
         thread_category_ids:
         [
                   "5bdcb766799fc227748f4453",//Other existing
                  category
                   "5be59e1f13047d026b6ca8af",//AGENT Handover
                  Category
         title: "Hello, I am following up on a post I wrote just now. I am
         interested in a wearable device for running, cycling and swimming, Do
         you guys...",
         last_content_at: "2018-11-06T17:32:54Z"
}
```

- The Bot stops answering the messages. You will still receive all content imported events.
  - The Bot will now only wait to new content.imported Payloads where the category is BOT
- The task will be proposed to agents with the AGENT skill (should be all agents on the chatbot connected source)
- [Optional, required if the Bot must handle intervention reopening, see below] Once the intervention is completed by the agent, **intervention.closed** will be fired to the endpoint of your choosing with the following information:



 Note: Human agents should not complete tasks with every message they sent ( and use the defer function instead), because else intervention.closed will be fired every time they complete a task

```
"id": "bd13a9d9baa8c20cf93046cd",
 "domain id": 1,
 "events": [{
  "type": "intervention.closed",
  "id": "70d340997b8cd2c6f4dfee22",
  "user id": "4f4f3a08a90ffb27ee000583",
  "resource": {
   "type": "intervention",
   "id": "5464b5c04d61639684110000",
   "metadata": {
    "custom_field_values": {
      "sample field": nil
    },
    "category_ids": ["4f3951557aa58d1462017a8f", "50895dbea90ffb3c35001ace"],
    "closed at": nil,
    "deferred at": nil,
    "identity id": "557f003c7765620fdc0002cc",
    "source_id": "56178fd27765625e06000a66",
    "thread id": "565739986b65795289000029",
    "user id": "52fcf5157aa58dd768000006"
   }
  },
  "issued_at": "2014-02-10T18:35:35.251Z"
}]
}
```

#### Intervention reopening

An intervention can be reopened if the customer contacts the brand just after the intervention is closed. It will trigger an intervention reopened webhook event. It's your choice to either let the agent handle first the communication (No need for thread categorisation) or direct the customer immediately back to the bot (Need to recategorize the thread just after the intervention is closed).

Business team will need to decide how you want this case to be handled





You can also choose to block the possibility to reopen the intervention by closing the thread via the REST API once the intervention is closed.

Please find below the walkthrough for both cases

#### Case 1: On intervention.reopened, the live agent handles the first level of support

- New Customer messages will reopen the intervention but contents will still be categorized as AGENT so the Bot will receive content imported events with the AGENT category which it should not reply to.
- The agent will receive the new task as the content is still categorized as AGENT
- The agent maintains the conversation with the customer and processes the Customer's requests
- When the agent completes the task, intervention.closed event is fired again
- If the next customer message is received after the source Thread Inclusion Delay (defined in the source configuration screen in RingCentral Engage Digital)

#### Case 2: On intervention.reopened, the bot handles the first level of support

- Here, the thread should be categorized as BOT when the intervention closes
- After receiving the intervention.closed event payload, the Bot categorises the thread as BOT using REST APIs.

#### NOTE

You will get the content category from the last content.imported event payload that you will receive before the intervention.close event.

- Replace the AGENT category by the BOT category by performing a HTTP PUT request on PLATFORM.api.engagement.dimelo.com/1.0/content\_threads/THREAD\_ID/upda te\_categories?access\_token=API\_ACCESS\_TOKEN&thread\_category\_ids[]=EXI
- The Bot should be reactivated and should handle the first level of communication again

STING CATEGORY ID&thread category ids[]=BOT CATEGORY ID

The conversation follows the same process like before the first handover



# **Emergency Handover to Agents** process

#### Manually deactivate Bot and/or Bot responses

See with the Bot vendor how to do it autonomously.

#### Deactivate Bot connected sources default categorization

With a Dimelo Administrator account:

- Go to Admin // Sources
- Double click the concerned source
- In "Default categories" field, remove the "BOT" Handover category
- In "Default categories" field, add the "AGENT" Handover category
- Click "Save" at the bottom of the page

New messages on new threads will be categorized as AGENT so Agents can process them directly.

#### Activate Emergency Handover rule

With a Dimelo Administrator account:

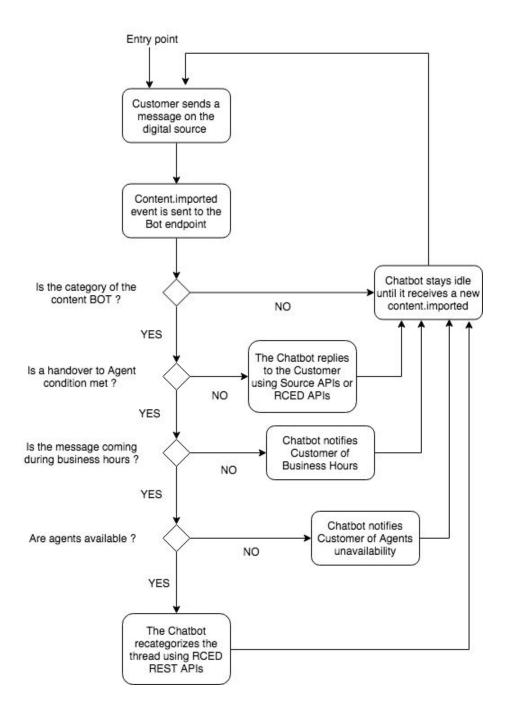
- Go to Admin // Rules engine
- Double click the "EMERGENCY Handover to Agents"
- Check "Activate"
- Click "Save" at the bottom of the page

Existing Bot conversations will be forcefully recategorized as AGENT (handover category).



# **Appendix**

## Realtime chatbot integration flow





# Manually execute a Dimelo Chat trigger

The Chat window will be displayed only if there are agents logged in task mode into RingCentral Engage Digital.

To have the Bot working 24/7, you need to manually execute a chat trigger that will display the chat.

The actual opening of the chat window will happen when the Bot Integrator or Website team will manually execute a chat trigger.

Please see below how to manually execute a trigger in JS:

```
var _chatq = _chatq || [];
 (function(){
  // Find elements of an array which satisfy a filter function
  var grep = function(items, callback) {
   var filtered = [],
      len = items.length,
      i = 0;
   for (i; i < len; i++) {
      var item = items[i];
      var cond = callback(item);
      if (cond) {
         filtered.push(item);
      }
   }
   return filtered;
  };
  // Check if Dimelo chat window is already open
  var checklfChatIsDisplayed = function(){
     return document.getElementsByClassName('dimelo-chat-window').length > 0;
  };
  // Hack to force a trigger activation
  var loadChatTrigger = function(trigger_id){
     // Get all activated trigger objects
```



```
var triggers = Dimelo.Chat.Manager.ChatQLoader.manager.triggers;
    // Find the good one
     var target_trigger = grep(triggers, function(e){
      return <u>e.id</u> == trigger_id; });
     if (target_trigger.length > 0 && !checklfChatlsDisplayed()){
      // Hack - Activate a dedicated trigger
      Dimelo.Chat.Manager.ChatQLoader.manager.activateTrigger(target_trigger[0]);
    }
  };
  var trigger_id = "xxxxxxxxxxxx" // Your trigger ID, you can find it into the trigger edit url
page
  // Wait the Dimelo chat library loading
  _chatq.push(['_onEvent', 'started', function (data){
    // Launch the trigger behaviour
    loadChatTrigger(trigger_id);
  }]);
})();
```



#### A PROPOS

Important note that need to be read

#### NOTE

Regular note text



Advice note



Warning note