

The logo for 'CHIME' consists of a blue Wi-Fi symbol above the word 'CHIME' in a bold, black, uppercase, sans-serif font. The letters 'I' and 'M' are colored blue to match the Wi-Fi symbol.

# CHIME

## ROUTING METHODS

A 3D graphic composed of several overlapping, semi-transparent blue and grey rectangular blocks arranged in a horizontal line, creating a sense of depth and perspective.

Spring 2017

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# CHIME ROUTING METHODS

## ROUTING

The routing method is how the Chime dispatches chat requests across agents in a queue. There are four routing methods: Hunt, Skill Best-Match Hunt, Longest Idle Hunt, and Broadcast. A queue can have only one routing method setting, but this can be changed at any time under the routing tab in queue settings.

The screenshot shows the 'Queue Settings' interface with the 'Routing' tab selected. The 'Select Routing Type' section includes a 'Routing Method' dropdown menu set to 'Hunt'. Below it are two checkboxes: 'Route By Priority?' and 'Always Route Guests In Order Of Arrival?', both of which are checked. The 'Accept Timeout (Seconds)' field is set to 30. The 'Guest Options' section includes a 'Guest Timeout (Seconds)' field set to 40, a 'Guest Update Interval (Seconds)' field set to 5, and a 'Rollover Queue' dropdown menu set to 'None'. At the bottom right, there are buttons for 'Queue Dashboard', 'Manage Queues', 'Reset', and 'Save'.

Figure 1: Routing tab in Queue Settings

## STEPS BEFORE ROUTING

For all of the routing methods, Chime takes the following steps:

1. Get a list of all the agents assigned in the queue
2. Of the agents assigned in the queue, which agents have an **available** Lync/Skype for Business status
3. Of the available agents, which agents are **not at their Maximum Concurrent chat limit**
4. Of the “not maxed-out right now” agents, which agents are **not at their Maximum Chats Per Day limit**
5. Of the “not maxed-out for the day” agents, which agents are **not in the excluded list**. The excluded list is made up of agents that have declined this chat session already, are set to “No Chats” in queue settings, or disabled themselves from the queue
6. After we get the list of agents that meet the above criteria, we then use the queue’s routing method to pick an agent to rout the chat to

## ROUTING METHODS

### HUNT

When using the Hunt routing method, Chime takes the agents from step 6 (in Steps Before Routing, above) and looks at the number of active chats they have currently, then the total number of chats they have taken today. The agent with the least number of active chats and total chats is then routed to.

If that agent doesn't accept the chat, the agent is put into the exclude list and the agent with the next lowest amount of total chats is then routed to. If **Route by Priority** is enabled, all agents at priority 1 are processed first, then priority 2, priority 3, and so on.

Example: No Priority

Agent	Active Chats Right Now	Chats Today	Routing Pick
Jane	2	5	
Migumi	2	8	
Juan	1	10	X

Juan is picked because they have the least number of active chats. If Juan doesn't accept the chat, then Jane is routed to next because they have the least number of chats today of the remaining agents.

Example: Route by Priority

Agent	Priority	Active Chats Right Now	Chats Today	Routing Pick
Jane	2	2	5	
Migumi	1	2	8	X
Juan	3	1	10	

Migumi is picked because they are the only agent at priority 1.

## SKILL BEST-MATCH HUNT

When using the Skill Best-Match Hunt routing method, Chime will take the Skill Tag that is assigned to the guest's request and choose an agent (from step 6 of the Steps Before Routing, above) that has a matching skill tag. If multiple agents have the matching skill tag, Chime will look at the available agents' total number of chats today before choosing an agent to route to. If no agent is available that has the matching skill tag, Chime will route the chat based on the Hunt methodology.

If **Route by Priority** is enabled, Chime searches for an agent with the skill tag by priority levels (1 first, then 2, then 3, and so on). If a match isn't found, Chime does a Hunt search with the Route by Priority enabled.

Example: No priority with skill tag "Password Reset"

Agent	Skill Tag	Active Chats Right Now	Chats Today	Routing Pick
Jane	Password Reset	2	5	X
Migumi	Password Reset	1	8	
Juan	VPN	1	10	

Jane is picked because they have the matching skill tag and the least number of chats today. If Jane declines the session, then Migumi would be routed to next.

Example: Route by Priority with skill tag “Password Reset”

Agent	Skill Tag	Priority	Active Chats Right Now	Chats Today	Routing Pick
Jane	Password Reset	3	2	5	
Migumi	Password Reset	2	1	8	X
Juan	VPN	1	1	10	

Juan is skipped at priority 1 because he doesn’t have the “Password Reset” skill tag. Migumi is picked because she is the only agent at priority 2 with the skill tag.

## LONGEST IDLE HUNT

When using the Longest Idle Hunt method, Chime takes the agents from step 6 (from the Steps Before Routing, above) and finds the agent that has not accepted a chat for the longest time and routes the chat to them. If that agent doesn’t accept the chat, the agent with the next longest time is chosen and then routed to.

If **Route by Priority** is enabled, agents that are set to priority 1 are processed first, even if the other priority levels have agents that have waited longer since their last chat they accepted. If no agents are available or do not accept at that priority level, Chime moves to the next priority level.

Example: No Priority

Agent	Time Since Last Accepted Chat	Active Chats Right Now	Chats Today	Routing Pick
Jane	3 minutes	2	5	X
Migumi	2 minutes	1	8	
Juan	1 minute	1	10	

Jane is picked because they have been idle the longest since they last accepted a chat. If Jane declines, then Migumi is routed to next.

Example: Route by Priority

Agent	Time Since Last Accepted Chat	Priority	Active Chats Right Now	Chats Today	Routing Pick
Jane	3 minutes	3	2	5	
Migumi	2 minutes	2	1	8	
Juan	1 minute	1	1	10	X

Juan is routed to first, because they are the only agent at priority 1. If Juan declines, then Migumi is routed to next because they are the only agent at priority 2.

## BROADCAST

When using the Broadcast routing method, Chime sends out an incoming chat request to all agents from step 6 (from the Steps Before Routing, above) at the same time. The agent that accepts the request first is routed to.

If **Route by Priority** is enabled, agents that are set to priority 1 are sent the broadcast first. All of these agents are notified at the same time, and they all have the opportunity to accept the chat. If no agent at priority 1 accepts the chat request, then all available agents at level 2 (and then level 3, and so on to the lowest priority, and then back to 1) are sent the broadcast until the incoming guest either times out waiting or an agent accepts.

Example: No Priority

Agent	Active Chats Right Now	Chats Today	Routing Pick
Jane	2	5	X
Migumi	2	8	X
Juan	1	10	X

Juan, Migumi, and Jane are all picked for the broadcast routing.

Example: Route by Priority

Agent	Priority	Active Chats Right Now	Chats Today	Routing Pick
Jane	2	2	5	
Migumi	1	2	8	X
Juan	3	1	10	

Migumi is picked because they are the only agent at priority 1. If Migumi declines, then Jane is picked because they are the only agent at priority 2.

## ROUTING OPTIONS

Here are explanations of the available options on the Routing tab of Queue Settings.

### ROUTING TYPE

- Routing Method
  - See Routing Methods, above
- Route by Priority?
  - See Routing Methods, above
- Always Route Guests In Order Of Arrival?
  - Enforces that guests are routed in the order that they arrive (first-in, first-out). Otherwise, the order that guests are routed is indeterminate.
- Accept Timeout
  - The number of seconds for an agent to accept or decline an incoming chat request before another agent is pinged.

## GUEST OPTIONS

- Guest Timeout
  - The number of seconds a guest will wait in routing before being told that no agents are available. When a guest times out Chime ends the session and it is marked as Timed Out.
- Guest Update Interval
  - The number of seconds defines how often Chime will send the text resource “Searching for Person” to the guest.
- Rollover Queue
  - If a guest times out, should their session be put in another queue for routing?



## ROUTING TAGS (ONLY FOR SKILL BEST-MATCH HUNT METHOD)

When the Skill Best-Match Hunt method is chosen, there is an area to define queue-level routing tags. These will appear automatically on the Guest Landing Page (home page) if the queue setting is set to “Publish to Home Page”.

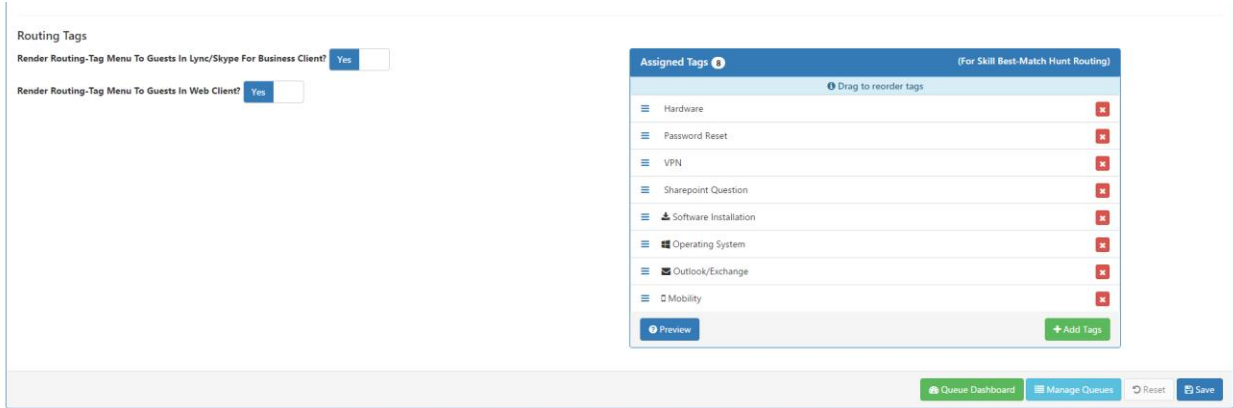


Figure 2: Queue Settings for Routing Tags

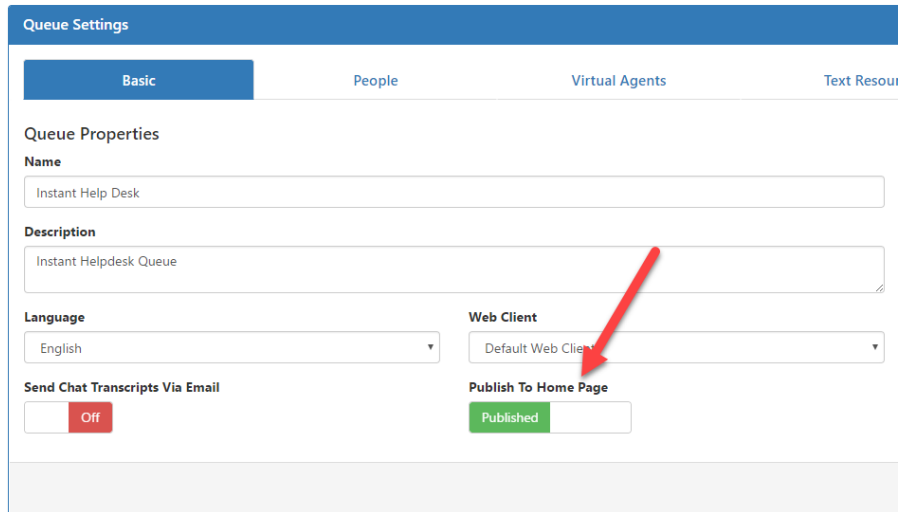


Figure 3: Publish Queue to Home Page

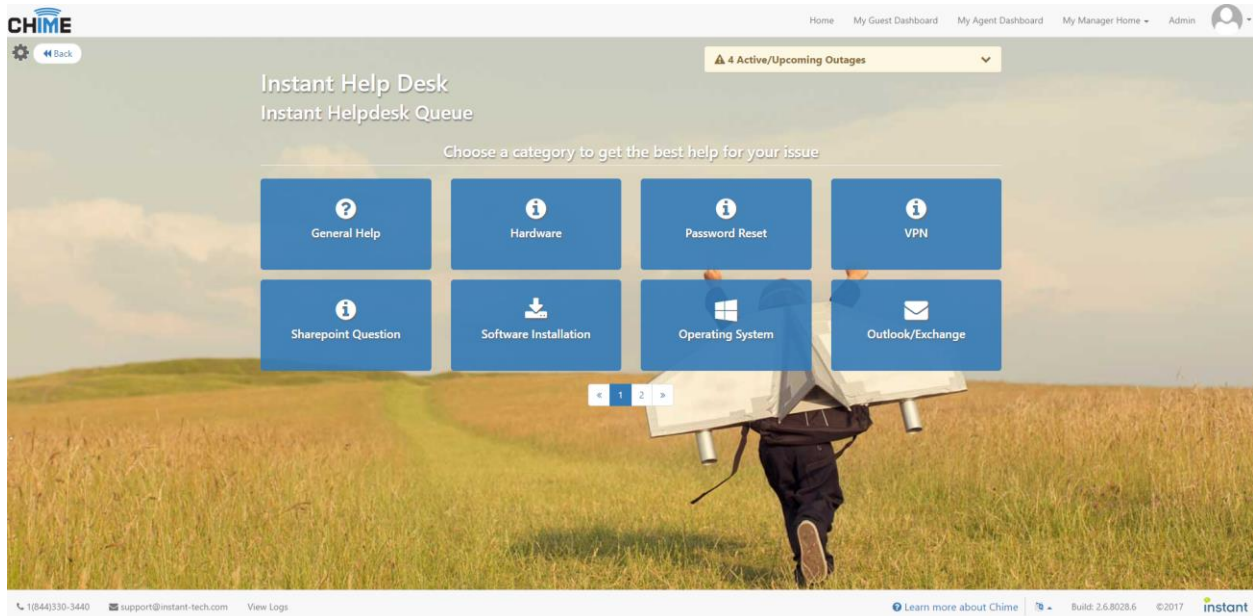


Figure 4: Guest Landing Page with Routing Tags

The routing tags show up as an IVR-style menu in the guests' chat client if either of the following settings are ON. The text resources "Routing Tag Menu Greeting", "Routing Tag Menu Option 0", and "Routing Tag Menu Invalid Response" are used to create the menu text. Guests select a routing tag by choosing a number from the menu.

- Render Routing-Tag Menu To Guests In Lync/Skype For Business Client?
  - The routing tags assigned to the queue are shown to guests using the Lync/Skype for Business client.
- Render Routing-Tag Menu To Guests In Web Client?
  - The routing tags assigned to the queue are shown to guests using the Web Client. If a routing tag has already been assigned, for example, from the pre-chat form or the guest landing page routing areas, then the routing tag menu is not shown.

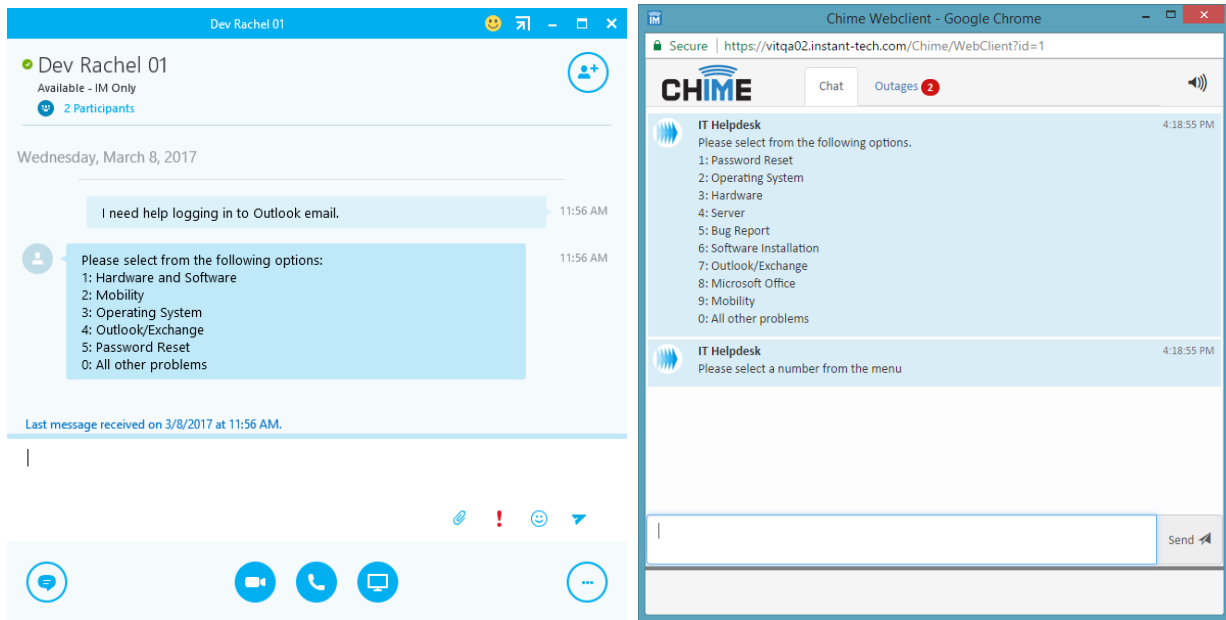


Figure 5: Routing Tag Menus

## REPORTING

Chime has ample charts and reports to provide in-depth metrics for tracking chat sessions, agent performance, and text analytics. Reports can be viewed at the queue-level or at a system-level for a view into how the service as a whole is performing. Here are just a few of the reports Chime offers that pertain to routing.

### CHAT STATISTICS BY PROBLEM TAG

This queue chart breaks down chat traffic over multiple days by the routing tag that guests chose.

Charts & Metrics / Text Analytics

Select A Report: Chat Statistics By Problem Tag    Start: 05/01/2017    Stop: 05/11/2017    Generate Chart    Export CSV

Tag	Total	Answered	Answered Within Target ASA	Abandoned	Abandoned After Target ASA	Answered %	Answered Within Target ASA %	Abandoned %	Abandoned After Target ASA %	Avg Chat Duration	Avg Wait Time	Avg Abandoned Wait Time
Not Provided	21	9	2	12	11	42.86	9.52	57.14	52.38	00:00:13	00:00:48	00:01:14
Software Installation	5	5	0	0	0	100.00	0.00	0.00	0.00	00:00:17	00:00:17	00:00:00
Hardware	3	2	1	1	1	66.67	33.33	33.33	33.33	00:00:06	00:01:01	00:02:52
Operating System	1	1	0	0	0	100.00	0.00	0.00	0.00	00:00:10	00:00:10	00:00:00
Outlook/Exchange	6	3	0	3	3	50.00	0.00	50.00	50.00	00:00:12	00:00:25	00:00:39
Microsoft Office	1	1	0	0	0	100.00	0.00	0.00	0.00	00:00:07	00:00:07	00:00:00
<b>Totals</b>	<b>37</b>	<b>21</b>	<b>3</b>	<b>16</b>	<b>15</b>	<b>56.76</b>	<b>8.11</b>	<b>43.24</b>	<b>40.54</b>	<b>00:00:13</b>	<b>00:00:39</b>	<b>00:01:13</b>

Figure 6: Chat Statistics By Problem Tag

### SESSIONS BY PROBLEM TAG

This report shows a pie chart of the chat traffic over multiple days and the routing tags that guests chose.

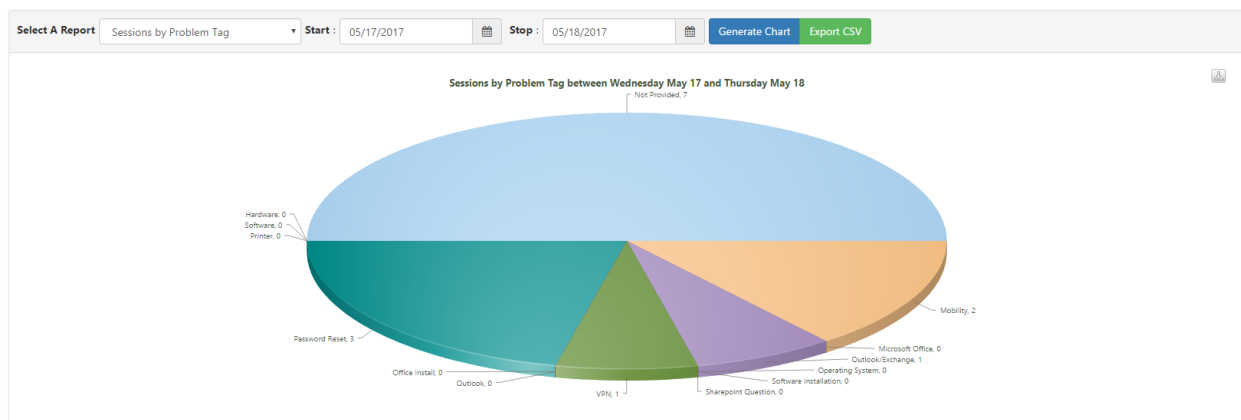


Figure 7: Sessions by Routing Tag

## CHAT STATISTICS

This report shows a high-level bar chart of sessions with the queue and how they ended up. For example, the bars show Abandoned, Answered, Disconnected, Waiting, and, Rolled-Over sessions.

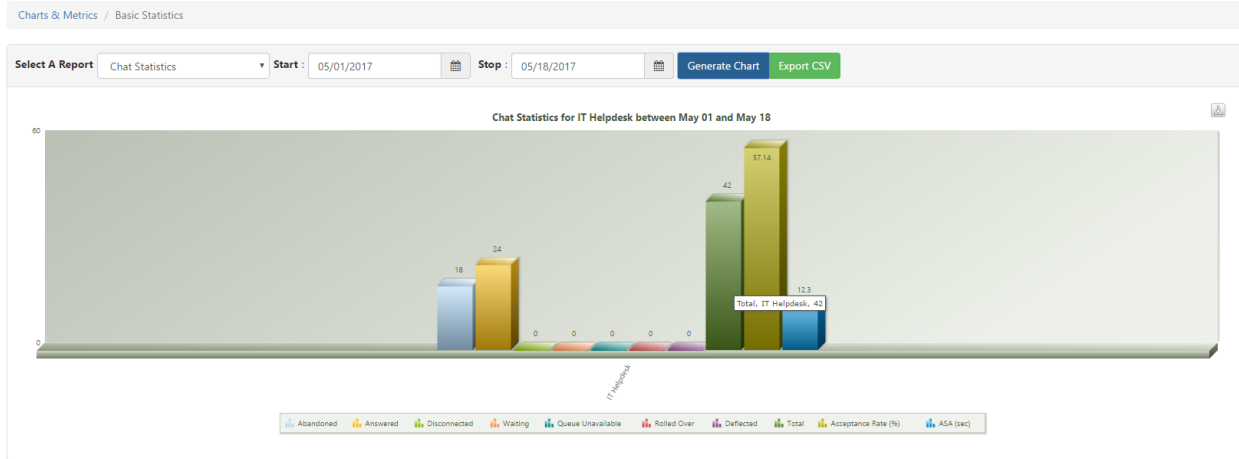


Figure 8: Chat Statistics

## ASA OVER TIME

This chart shows the average speed to answer (ASA) of all the agents in the queue over time.

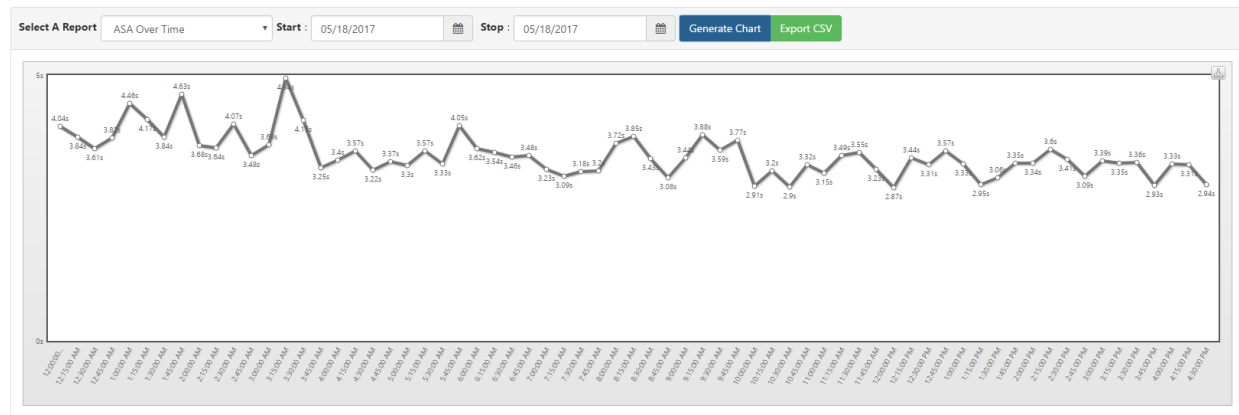


Figure 9: ASA Over Time

## DECLINED/IGNORED OVER TIME

This report shows the number of times agents in a queue declined (for example, by pressing 'n') or ignored (didn't respond) to an incoming chat request.

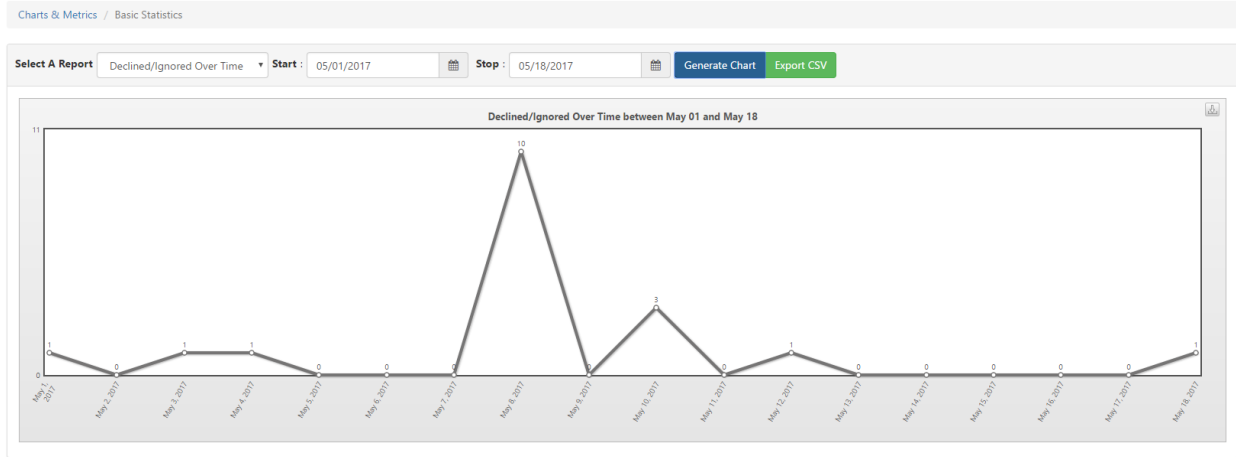


Figure 10: Declined/ignored Over Time