

# NotificationFunction

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## How the service works

The service is made of two functions:

1. an **HTTP trigger** that expects a request carrying a json body. We expect the body to contain multiple sub-objects each representing a notification that will be sent to a **specific user**. The body will have this structure:

```
{
  "messages": [
    <messageObject>,
    <messageObject>,
    ...
    ...
    ...
  ]
}
```

To add a layer of security to the http trigger, we require each request to have the header **x-api-key** containing the api key value. If the header is not sent or the api key value does not match, the messages will not be processed by the service.

2. a **ServiceBus trigger** that processes one message and interact with **Microsoft Notifications Hub** to send the push notification to the user/s using the tag/channel specified in the message itself.

## Message structure

In our first implementation we decided that the service will send a notification to a specific user. For this reason each message object, will have to contain **all** of the information necessary to send the push notification to the user, even if there is redundancy within the information sent on each message.

This is the structure we expect:

```
{
  "title": string,
  "body": string,
  "tags": string[],
  "platforms": string[],
  "type": string,
  "id": string?,
}
```

1. **"title"** (*mandatory*) is a string containing the title of the notification, this will be displayed on the user device.

2. **"body"** (*mandatory*) is a string containing the body of the notification, this will also be displayed on the user device.
3. **"tags"** (*mandatory*) is an array of strings which determines who will receive the push notification.  
**NOTE:** in our system we need to specify the **profileSlug** (*mandatory*) value of a user to send a push notification to that user. So in our case **tag** must contain the **profileSlug** value. Failing to provide the correct value for a user will result in a failure to send the notification to that user.
4. **"platforms"** (*mandatory*) is an array of strings representing the OS of the devices of the user. **NOTE:** since our app is available only on **iOS** and **Android**, the user can have at most two different type of devices, hence the **platforms** array can only contain **one or two** elements. For **Android** we expect to receive the string **"fcm"**, for **"iOS"** we expect to receive **"apns"**. If the user actively uses device on both platforms we expect to receive both **"apns"** and **"fcm"** in the array.
5. **"type"** (*mandatory*) is a string representing a label that will "tell" the mobile app what action needs to be performed after receiving the push notification. It will be **"POST"** if we want to open a particular video in app. It will be **"FEED"** if we want to open a particular filtered feed (NOT YET IMPLEMENTED IN APP ATM).
6. **"id"** (*mandatory*) is a string field its value varies depending on the **"type"** property. If **"type": "POST"** then **"id"** will be a **keyId** string corresponding to the post we want the user to visualize. If **"type": "FEED"** then **"id"** will be a string containing one or more **feedListId**. **NOTE:** in case the feed is filtered by multiple filters then always use a comma **,** to separate them inside the string.

## Examples

Send a push notification to open a specific video:

```
{
  "title": "Nuovo video virale per te",
  "body": "Ciao Daniele, abbiamo pensato che questo nuovo video possa piacerti: scopri anche tu le terme di Saturnia",
  "tags": [ "danieleguerzoni-8a01ea0a" ],
  "platforms": [ "fcm" ],
  "type": "POST",
  "id": "2802aeed962e845d48d8a44d6f3394629740b3af83e2bab54f6fc5dab3edf3f0"
}
```

Send a push notification to open a filtered feed:

```
{
  "title": "Scopri la Toscana",
  "body": "Ciao Daniele, scopri le opportunita' di relax che la Toscana ha da offrirti",
  "tags": [ "danieleguerzoni-8a01ea0a" ],
  "platforms": [ "fcm" ],
  "type": "FEED",
  "id": "IT_16,THM-012"
}
```

