



Female Tech Leader Hackathon Oct. 2018 Postman



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Who am I



- Peter Daum
- Senior Software Engineer working at the core SMS delivery platform
- 5+ years @ tyntec
- Keen on software quality, love hiking with my family and training Brandy





Tyntecs APIs



A brief overview on tyntecs apis



- REST APIs, secured either by api token or username / password
- Messaging via
 - **SMS**
 - **Mobile Chat** (eg. Facebook Messenger)
- **One time password**
- Global Number Portability
- Global Number Verification



Using the APIs



Access via API Key



- The overhauled / new APIs can be accessed only by an API Key
- The API Key removes the necessity to use username / password
- Internally it's linked with the customers account
- Can be easily changed by the customer
- Or blocked by us in case we get aware of a security issue

Using our APIs



- Command line tools like cURL or httpi (examples on the homepage)
- Programming languages that support HTTPS based communication
- Tools like Postman



Postman? Collection? Environment?

Postman?



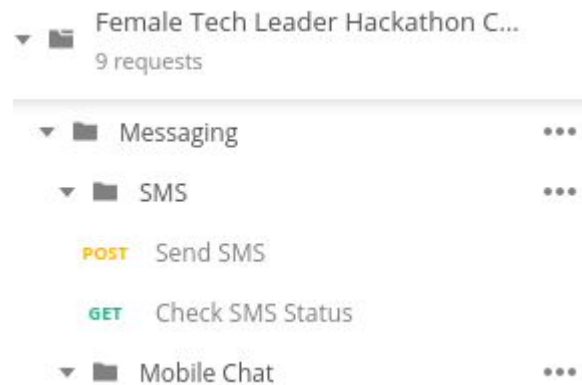
- Postman is an application that makes it easy to use http based APIs without dealing with command line tools

```
→ ~ curl http://username:password@ape6:8180/rest/v1/100503-0a2ed0a1-5d21-4524-98cb-25fd8c429508
```

Collection?



- Postman Collections are prepared sets of API calls



Environment?



- The Environment of Postman is a set of attributes that can be used in Collections
- It allows Collections to be templated
- It makes it easy to use the same Collection but for different target systems
 - Production
 - QA



Setting up Postman

Prepare the Collection



- Unpack the file *femaleTechLeader - Oct 2018 - Postman.zip*

Setup Postman

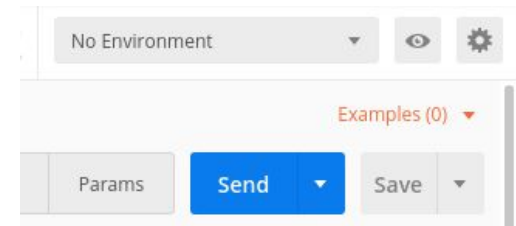


- Download Postman from <https://www.getpostman.com/apps>
- Run the installation
- Start the application and skip the login / register pages
- Open the *File* menu and select *Import* item
- Choose now *Import Folder* and select the folder you unpacked the collection into after clicking on *Choose Folders*
- Now both the collection and the Environment is imported

Preparing the collection



- In order to use the collection in Postman the apikey, username and password needs to be specified as well as the receiver number
This needs to be done in the Environment section
- In the right upper corner is a Box stating *No Environment*
click on it and select *Female Tech Leader Hackathon*
- Now click on the Eye icon and use the pen symbol on the values in the right most column to set the values for *apikey*, *username*, *password* to the credentials provided





Play around



Play around



- The following examples make use of Postman
- The requests can be easily transferred as cURL or httpie or .. code when using the *Code* button the right side after selecting the request.



Messaging via SMS



Send a SMS



- On the left side open the folder structure *Messaging* → *SMS* and select *Send SMS*
- Change the *to* number in the Environment to your own with international prefix

- | | | |
|---------|--------------------------------------|--------------------------------------|
| to | +4917624435312 | +4917624435312 |
| message | Hi from Female Tech Leader Hackathon | Hi from Female Tech Leader Hackathon |

- Now click on *Send*
- The result should look like this

```
Body Cookies (1) Headers (18) Test Results
Pretty Raw Preview JSON
1 {
2   "requestId": "100503-fc25cdf9-f5a2-44d2-b504-501b830efaea",
3   "size": 1,
4   "msgIdList": [
5     "100503-1539350737087+4917624435312"
6   ]
7 }
```

Check status of the SMS



- Copy from the response the value *requestId* and put it into the *requestId* field of the Environment

message	Hi from Female Tech Leader Hackathon	Hi from Female Tech Leader Hackathon
requestId	requestId	100503-fc25cdf9-f5a2-44d2-b504-501b830efaea

- Choose the *Check SMS Status* command from the left side and click on *Send*
- The result should look like this

```
{
  "requestId": "100503-fc25cdf9-f5a2-44d2-b504-501b830efaea",
  "overallState": "DELIVERED",
  "size": 1,
  "userContext": "",
  "mccmnc": "26207",
  "ttid": "16",
  "contentList": [
    {
      "deliveryState": "DELIVERED",
      "statusText": "Hi from Female Tech ",
      "msgId": "100503-1539350737087+4917624435312",
      "errorCode": "001",
      "sentDate": "2018-10-12T13:25:37+00:00",
      "doneDate": "2018-10-12T13:25:48+00:00"
    }
  ],
  "from": "tyntec",
  "to": "+4917624435312"
}
```



One time passwords



Send an One Time Password



- On the left side open the folder structure *OTP – One time password* select *Send OTP*
- Now click on *Send*
- The result should look like this
- You should have received an password by SMS

```
{  
  "accountId": "femalecpaas",  
  "applicationId": "2da63bb9-b3ac-3cb6-9b87-905024c38206",  
  "otpId": "e9a00845-a4fc-43b9-9f85-f6c61d90b07b",  
  "number": "+4917624435312",  
  "attemptCount": 0,  
  "otpStatus": "ACTIVE",  
  "referenceId": null,  
  "expire": 1539351765250,  
  "created": 1539351465250,  
  "timestampExpire": "2018-10-12T13:42:45.250Z",  
  "timestampCreated": "2018-10-12T13:37:45.250Z"  
}
```

Check OTP status



- Copy from the previous result the *otpld* and put it in the *Environment* under the key *otpld*

otpcode	otpcode	1009
otpld	otpld	e9a00845-a4fc-43b9-9f85-f6c61d90b07b

- On the left side open the folder structure *OTP – One time password* select *Check OTP*
- Click on send

Check OTP status - continued



- The result should look like this

```
{
  "accountId": "femalecpaas",
  "applicationId": "2da63bb9-b3ac-3cb6-9b87-905024c38206",
  "otpId": "e9a00845-a4fc-43b9-9f85-f6c61d90b07b",
  "number": "+4917624435312",
  "attemptCount": 0,
  "otpStatus": "ACTIVE",
  "referenceId": null,
  "expire": 1539351765250,
  "created": 1539351465250,
  "timestampCreated": "2018-10-12T13:37:45.250Z",
  "timestampExpire": "2018-10-12T13:42:45.250Z"
}
```

Verify the OTP code



- In the *Environment* put the code you have received before in the *otpCode* field
- On the left side open the folder structure *OTP – One time password* select *Verify OTP code*
- Click on *Send*
- The result look should like this

```
{  
  "accountId": "femalecpaas",  
  "applicationId": "2da63bb9-b3ac-3cb6-9b87-905024c38206",  
  "otpId": "b8427117-09c9-4396-b6ac-d1e70db59dd4",  
  "number": "+4917624435312",  
  "attemptCount": 1,  
  "otpStatus": "VERIFIED",  
  "referenceId": null,  
  "expire": 1539352101690,  
  "created": 1539351801690,  
  "timestampExpire": "2018-10-12T13:48:21.690Z",  
  "timestampCreated": "2018-10-12T13:43:21.690Z"  
}
```