Real-time Arrival Information of

The Kowloon Motor Bus Company (1933) Limited

API Specifications

Version 1.03

10 May 2021

Amendment History

Version Number	Revision Details	Revision Date
1.00	Initial Version	08 Mar 2021
1.01	Revise the API description and sample response data.	11 Mar 2021
1.02	Revise the API description and sample response data for the ETA APIs.	15 Mar 2021
1.03	Revise the API sample response of Route and Route-Stop APIs.	10 May 2021

TABLE OF CONTENTS

1.	API BASE URL	4
2.	ROUTE API	4
3.	ROUTE LIST API	7
4.	STOP API	9
5.	STOP LIST API	11
6.	ROUTE-STOP API	13
7.	ROUTE-STOP LIST API	16
8.	ETA API	19
9.	STOP ETA API	23
10.	ROUTE ETA API	30
11.	ERROR RESPONSE	38

1. API Base URL

All APIs described in this document share the following base URL:

Base URL	https://data.etabus.gov.hk/

Please note that URL and parameters in API requests are case-sensitive.

2. Route API

Description: This API takes a KMB's operating bus route number, direction and service type, and returns the respective route information.

HTTP Request:

Endpoint	/v1/transport/kmb/route/{route}/{direction}/{service_type}
HTTP Method	GET

Parameter	Parameter Type	Description	Required
route	Path	The route number of the respective bus company that specified above. Case sensitive.	Y
direction	Path	The direction of the route number that specified above. Case sensitive. Valid directions are:	Y

		• outbound	
		• inbound	
service_type	Path	The service type of the bus route.	Y

Sample Request:

```
/v1/transport/kmb/route/74B/outbound/1
```

HTTP Response:

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
    "type": "Route",
    "version": "1.0",
    "generated_timestamp": "2020-11-29T11:40:48+08:00",
    "data": {
        "co": "KMB",
        "route": "74B",
        "bound": "0",
```

3. Route List API

Description: This API return all bus routes of KMB.

HTTP Request:

Endpoint	/v1/transport/kmb/route/
HTTP Method	GET

Sample Request:

/v1/transport/kmb/route/

HTTP Response:

JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
    "type": "RouteList",
    "version": "1.0",
```

```
"generated_timestamp": "2020-11-29T11:40:48+08:00",
"data": [
    ...,
    {
        "co": "KMB",
        "route": "74B",
        "bound": "0",
        "service_type": "1",
        "orig_en": "KOWLOON BAY",
        "orig_tc": "九龍灣",
        "orig_sc": "九龙湾",
        "dest_en": "TAI PO CENTRAL",
        "dest_tc": "大埔中心",
        "dest_sc": "大埔中心",
        "data_timestamp": "2020-11-29T11:40:00+08:00"
    },
    {
        "co": "KMB",
        "route": "74B",
        "bound": "I",
        "service_type": "1",
        "orig_en": "TAI PO CENTRAL",
        "orig_tc": "大埔中心",
        "orig_sc": "大埔中心",
        "dest_en": "KWUN TONG FERRY",
        "dest_tc": "觀塘碼頭",
        "dest_sc": "观塘码头",
        "data_timestamp": "2020-11-29T11:40:00+08:00"
    },
    . . .
]
```

4. Stop API

Description: This API takes a 16-character bus stop ID and returns the respective bus stop information.

(Remark: To find the corresponding bus stop ID, the user can query the "Route-Stop API")

HTTP Request:

Endpoint	/v1/transport/kmb/stop/{stop_id}
HTTP Method	GET

Parameter	Parameter Type	Description	Required
stop_id	Path	16-character representation of a bus stop. Case sensitive.	Y

Sample Request:

/v1/transport/kmb/stop/A3ADFCDF8487ADB9

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body

500	Internal Server Error

```
{
    "type": "Stop",
    "version": "1.0",
    "generated_timestamp": "2020-11-29T11:40:48+08:00",
    "data": {
        "stop": " A3ADFCDF8487ADB9",
        "name_tc": "中秀茂坪",
        "name_en": "SAU MAU PING (CENTRAL)",
        "name_sc": "中秀茂坪",
        "lat": 22.318856,
        "long": 114.231353,
        "data_timestamp": "2020-11-29T11:40:00+08:00"
    }
}
```

5. Stop List API

Description: This API returns all bus stop information at once.

HTTP Request:

Endpoint	/v1/transport/kmb/stop
HTTP Method	GET

Sample Request:

/v1/transport/kmb/stop

HTTP Response:

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
    "type": "StopList",
```

```
"version": "1.0",
    "generated_timestamp": "2020-11-29T11:40:48+08:00",
    "data": [
        {
             "stop": " A3ADFCDF8487ADB9",
             "name_tc": "中秀茂坪",
             "name_en": "SAU MAU PING (CENTRAL)",
             "name_sc": "中秀茂坪",
             "lat": 22.318856,
             "long": 114.231353,
             "data_timestamp": "2020-11-29T11:40:00+08:00"
        },
        {
             "stop": "6F106FD26B684372",
             "name_en": "SAU ON HOUSE",
             "name_tc": "秀安樓",
             "name_sc": "秀安楼",
             "lat": "22.316738",
             "long": "114.233354",
             "data_timestamp": "2020-11-29T11:40:00+08:00"
        },
    ]
}
```

6. Route-Stop API

Description: This API takes a route direction and the KMB's operating bus route number and returns the stop information of the respective route.

HTTP Request:

Endpoint	<pre>/v1/transport/kmb/route- stop/{route}/{direction}/{service_type}</pre>
HTTP Method	GET

Parameter	Parameter Type	Description	Required
route	Path	The route number of the respective bus company that specified above. Case sensitive.	Y
direction	Path	The direction of the route number that specified above. Case sensitive. Valid directions are: • inbound - the direction towards the origin • outbound - the direction towards the destination	Y
service_type	Path	The service type of the bus route.	Y

Sample Request:

/v1/transport/kmb/route-stop/1A/outbound/1

HTTP Response:

Response Format	JSON
Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
    "type": "RouteStop",
    "version": "1.0",
    "generated_timestamp": "2020-11-29T11:40:48+08:00",
    "data": [
         {
             "co": "KMB",
             "route": "1A",
             "bound": "0",
             "service_type": "1",
             "seq": 1,
             "stop": "A3ADFCDF8487ADB9",
             "data_timestamp": "2020-11-29T11:40:00+08:00"
         },
         . . .
         {
             "co": "KMB",
             "route": "1A",
             "bound": "0",
```

7. Route-Stop List API

Description: This API takes returns the stop information of all routes.

HTTP Request:

Endpoint	/v1/transport/kmb/route-stop
HTTP Method	GET

Sample Request:

/v1/transport/kmb/route-stop

HTTP Response:

Response Format	JSON	

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
    "type": "RouteStopList",
```

```
"version": "1.0",
"generated_timestamp": "2020-11-29T11:40:48+08:00",
"data": [
    {
        "co": "KMB",
        "route": "1A",
        "bound": "0",
        "service_type": "1",
        "seq": 1,
        "stop": "A3ADFCDF8487ADB9",
        "data_timestamp": "2020-11-29T11:40:00+08:00"
    },
    {
        "co": "KMB",
        "route": "1A",
        "bound": "0",
        "service_type": "1",
        "seq": 34,
        "stop": "DCFF4041D0C0ACF8",
        "data_timestamp": "2020-11-29T11:40:00+08:00"
    },
    {
        "co": "KMB",
        "route": "2",
        "bound": "0",
        "service_type": "1",
        "seq": 1,
        "stop": "25BD7B50919AA221",
        "data_timestamp": "2020-11-29T11:40:00+08:00"
```

```
},
...
]
```

8. ETA API

Description: This API takes a bus stop ID, the KMB's operating bus route number and service type; then, it returns the "estimated time of arrival" (ETA) information of the respective route at the stop. Please note that the returned ETA information is also included in other service types of the same route number if they share the same bus stop. (Remark: up to 3 ETA data may be returned for each direction.)

HTTP Request:

Endpoint	/v1/transport/kmb/eta/{stop_id}/{route}/{service_type}	
HTTP Method	GET	

Parameter	Parameter Type	Description	Required
stop_id	Path	16-characters representation of a bus stop. Case sensitive.	Y
route	Path	The route number of the respective bus company that specified above. Case sensitive.	Y
service_type	Path	The Service type of the bus route. Please note that returned ETA data is also included in other service types of the same route number if they share the same bus stop.	Y

Sample Request:

/v1/transport/kmb/eta/A60AE774B09A5E44/40/1

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
   "type": "ETA",
   "version": "1.0",
   "generated_timestamp": "2021-03-04T17:22:35+08:00",
   "data": [
       {
           "co": "KMB",
           "route": "40",
           "dir": "0",
           "service_type": 1,
           "seq": 7,
           "stop": "A60AE774B09A5E44",
           "dest_tc": "麗港城",
           "dest_sc": "丽港城",
           "dest_en": "LAGUNA CITY",
           "eta_seq": 1,
           "eta": "2021-03-04T17:25:51+08:00",
           "rmk_tc": "",
           "rmk_sc": "",
```

```
"rmk_en": "",
   "data_timestamp": "2021-03-04T17:22:15+08:00"
},
{
   "co": "KMB",
   "route": "40",
   "dir": "0",
   "service_type": 1,
   "seq": 7,
   "stop": "A60AE774B09A5E44",
   "dest_tc": "麗港城",
   "dest_sc": "丽港城",
   "dest_en": "LAGUNA CITY",
   "eta_seq": 2,
   "eta": "2021-03-04T17:41:44+08:00",
   "rmk_tc": "原定斑次",
   "rmk_sc": "原定斑次",
   "rmk_en": "Scheduled Bus",
   "data_timestamp": "2021-03-04T17:22:15+08:00"
},
{
   "co": "KMB",
   "route": "40",
   "dir": "0",
   "service_type": 1,
   "seq": 7,
   "stop": "A60AE774B09A5E44",
   "dest_tc": "麗港城",
   "dest_sc": "丽港城",
   "dest_en": "LAGUNA CITY",
```

```
"eta_seq": 3,

"eta": "2021-03-04T17:54:08+08:00",

"rmk_tc": "原定班次",

"rmk_sc": "原定班次",

"rmk_en": "Scheduled Bus",

"data_timestamp": "2021-03-04T17:22:15+08:00"

}
]
```

9. Stop ETA API

Description: This API takes a bus stop ID; then, it returns the "estimated time of arrival" (ETA) information of all routes at that stop.

Please note that the returned ETA information of a route with a service type is also included in other service types of the same route number if they share the same bus stop.

HTTP Request:

Endpoint	/v1/transport/kmb/stop-eta/{stop_id}
HTTP Method	GET

Parameter	Parameter Type	Description	Required
stop_id	Path	16-characters representation of a bus stop.	Y

Sample Request:

/v1/transport/kmb/stop-eta/B8B04CD1E568B8F6

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body

500	Internal Server Error

```
{
 "type": "StopETA",
 "version": "1.0",
 "generated_timestamp": "2021-03-18T12:21:38+08:00",
 "data": [
   {
     "co": "KMB",
     "route": "234X",
     "dir": "I",
     "service_type": 1,
     "seq": 2,
     "dest_tc": "尖沙咀東(麼地道)",
     "dest_sc": "尖沙咀东(么地道)",
     "dest_en": "TSIM SHA TSUI EAST (MODY ROAD)",
     "eta_seq": 1,
     "eta": "2021-03-18T12:31:59+08:00",
     "rmk_tc": "原定斑次",
     "rmk_sc": "原定斑次",
     "rmk_en": "Scheduled Bus",
     "data_timestamp": "2021-03-18T12:21:15+08:00"
   },
   {
     "co": "KMB",
     "route": "234X",
     "dir": "I",
     "service_type": 1,
     "seq": 2,
     "dest_tc": "尖沙咀東(麼地道)",
```

```
"dest_sc": "尖沙咀东(么地道)",
 "dest_en": "TSIM SHA TSUI EAST (MODY ROAD)",
 "eta_seq": 2,
 "eta": "2021-03-18T12:46:59+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
 "co": "KMB",
 "route": "234X",
 "dir": "I",
 "service_type": 1,
 "seq": 2,
 "dest_tc": "尖沙咀東(麼地道)",
 "dest_sc": "尖沙咀东(么地道)",
 "dest_en": "TSIM SHA TSUI EAST (MODY ROAD)",
 "eta_seq": 3,
 "eta": "2021-03-18T13:02:00+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 1,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
```

```
"dest_en": "LAGUNA CITY",
 "eta_seq": 1,
 "eta": "2021-03-18T12:33:19+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定班次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 1,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
 "dest_en": "LAGUNA CITY",
 "eta_seq": 2,
 "eta": "2021-03-18T12:53:19+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定班次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 1,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
 "dest_en": "LAGUNA CITY",
```

```
"eta_seq": 3,
 "eta": "2021-03-18T12:53:19+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 2,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
 "dest_en": "LAGUNA CITY",
 "eta_seq": 1,
 "eta": "2021-03-18T12:33:19+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定班次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 2,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
 "dest_en": "LAGUNA CITY",
 "eta_seq": 2,
```

```
"eta": "2021-03-18T12:53:19+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "40",
 "dir": "0",
 "service_type": 2,
 "seq": 3,
 "dest_tc": "麗港城",
 "dest_sc": "丽港城",
 "dest_en": "LAGUNA CITY",
 "eta_seq": 3,
 "eta": "2021-03-18T12:53:19+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T12:21:15+08:00"
},
{
 "co": "KMB",
 "route": "N48",
 "dir": "I",
 "service_type": 1,
 "seq": 2,
 "dest_tc": "愉翠苑",
 "dest_sc": "愉翠苑",
 "dest_en": "YU CHUI COURT",
 "eta_seq": 1,
 "eta": null,
```

```
"rmk_tc": "服務只限於星期日及公眾假期",
"rmk_sc": "服务只限于星期日及公众假期",
"rmk_en": "This route only operates on Sundays and Public Holidays",
"data_timestamp": "2021-03-18T12:21:15+08:00"
},
...
]
```

10. Route ETA API

Description: This API takes the KMB's operating bus route number(s) and service type(s); then, it returns the "estimated time of arrival" (ETA) information of all stops on the respective route. The data format is the same as ETA API. Please note that the returned ETA information is also included in other service types of the same route number if they share the same bus stop

HTTP Request:

Endpoint	/v1/transport/kmb/route-eta/{route}/{service_type}
HTTP Method	GET

Parameter	Parameter Type	Description	Required
route	Path	The route number of the respective bus company that specified above. Case sensitive.	Y
service_type	Path	The service type of the bus route. Please note that the returned ETA information is also included in other service types of the same route number if they share the same bus stop.	Y

Sample Request:

/v1/transport/kmb/route-eta/3M/1

Response Format	JSON

Response Code	Response
200	Success, see sample response below
422	See message in the response body
500	Internal Server Error

```
{
 "type": "RouteETA",
 "version": "1.0",
 "generated_timestamp": "2021-03-18T13:39:50+08:00",
 "data": [
   {
     "co": "KMB",
     "route": "3M",
     "dir": "0",
     "service_type": 1,
     "seq": 1,
     "dest_tc": "彩雲",
     "dest_sc": "彩云",
     "dest_en": "CHOI WAN",
     "eta_seq": 1,
     "eta": "2021-03-18T13:50:00+08:00",
     "rmk_tc": "原定班次",
     "rmk_sc": "原定斑次",
     "rmk_en": "Scheduled Bus",
     "data_timestamp": "2021-03-18T13:39:46+08:00"
   },
   {
     "co": "KMB",
     "route": "3M",
```

```
"dir": "0",
 "service_type": 1,
 "seq": 1,
 "dest_tc": "彩雲",
 "dest_sc": "彩云",
 "dest_en": "CHOI WAN",
 "eta_seq": 2,
 "eta": "2021-03-18T14:10:00+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定班次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "0",
 "service_type": 1,
 "seq": 1,
 "dest_tc": "彩雲",
 "dest_sc": "彩云",
 "dest_en": "CHOI WAN",
 "eta_seq": 3,
 "eta": "2021-03-18T14:30:00+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
 "co": "KMB",
 "route": "3M",
 "dir": "0",
```

```
"service_type": 1,
 "seq": 2,
 "dest_tc": "彩雲",
 "dest_sc": "彩云",
 "dest_en": "CHOI WAN",
 "eta_seq": 1,
 "eta": "2021-03-18T13:51:29+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定斑次",
 "rmk en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "0",
 "service_type": 1,
 "seq": 2,
 "dest_tc": "彩雲",
 "dest_sc": "彩云",
 "dest_en": "CHOI WAN",
 "eta_seq": 2,
 "eta": "2021-03-18T14:11:28+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定班次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "0",
 "service_type": 1,
```

```
"seq": 2,
"dest_tc": "彩雲",
"dest_sc": "彩云",
"dest_en": "CHOI WAN",
"eta_seq": 3,
"eta": "2021-03-18T14:31:28+08:00",
"rmk_tc": "原定班次",
"rmk_sc": "原定班次",
"rmk_en": "Scheduled Bus",
"data_timestamp": "2021-03-18T13:39:46+08:00"
},
....
}
```

Sample Request:

```
/v1/transport/kmb/route-eta/3M/2
```

```
{
  "type": "RouteETA",
  "version": "1.0",
  "generated_timestamp": "2021-03-18T13:39:53+08:00",
  "data": [
      {
         "co": "KMB",
         "route": "3M",
         "dir": "I",
         "service_type": 2,
         "seq": 1,
```

```
"dest_tc": "慈雲山(南)",
 "dest_sc": "慈云山(南)",
 "dest_en": "TSZ WAN SHAN (SOUTH)",
 "eta_seq": 1,
 "eta": "2021-03-18T13:40:00+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "I",
 "service_type": 2,
 "seq": 1,
 "dest_tc": "慈雲山(南)",
 "dest_sc": "慈云山(南)",
 "dest_en": "TSZ WAN SHAN (SOUTH)",
 "eta_seq": 2,
 "eta": "2021-03-18T14:00:00+08:00",
 "rmk_tc": "原定班次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "I",
 "service_type": 2,
 "seq": 1,
 "dest_tc": "慈雲山(南)",
```

```
"dest_sc": "慈云山(南)",
 "dest_en": "TSZ WAN SHAN (SOUTH)",
 "eta_seq": 3,
 "eta": "2021-03-18T14:20:00+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
 "co": "KMB",
 "route": "3M",
 "dir": "I",
 "service_type": 2,
 "seq": 2,
 "dest_tc": "慈雲山(南)",
 "dest_sc": "慈云山(南)",
 "dest_en": "TSZ WAN SHAN (SOUTH)",
 "eta_seq": 1,
 "eta": "2021-03-18T13:41:26+08:00",
 "rmk_tc": "原定斑次",
 "rmk_sc": "原定斑次",
 "rmk_en": "Scheduled Bus",
 "data_timestamp": "2021-03-18T13:39:46+08:00"
},
{
 "co": "KMB",
 "route": "3M",
 "dir": "I",
 "service_type": 2,
 "seq": 2,
 "dest_tc": "慈雲山(南)",
 "dest_sc": "慈云山(南)",
```

```
"dest_en": "TSZ WAN SHAN (SOUTH)",

"eta_seq": 2,

"eta": "2021-03-18T14:01:29+08:00",

"rmk_tc": "原定班次",

"rmk_sc": "原定班次",

"rmk_en": "Scheduled Bus",

"data_timestamp": "2021-03-18T13:39:46+08:00"

},

...
}
```

11. Error Response

In case of an API execution error, a corresponding HTTP response code will be returned along with the same response code and an error message in the JSON body.

HTTP Response:

Response Format	JSON

```
{
    "code": "422",
    "message": "Invalid/Missing parameter(s)"
}
```