

# Bus Route List and Estimated Arrival Time of a Specific Bus Stop API

## **API Specifications**

Version 1.0  
December 2019

**Amendment History**

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## 1. API Base URL

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

<b>Base URL</b>	<code>https://rt.data.gov.hk/</code>
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## 2. Stop-Route API

**Description:** This API takes a company ID and its respective stop ID and returns all the route information of the specified stop.

**HTTP Request:**

<b>Endpoint</b>	<code>/v1/transport/batch/stop-route/{company_id}/{stop_id}</code>
<b>HTTP Method</b>	GET

Parameter	Parameter Type	Description	Required
company_id	Path	Company ID  Valid company IDs are: <ul style="list-style-type: none"> <li>• CTB - Citybus Limited</li> <li>• NWFBS - New World First Bus Service Limited</li> <li>• NLB - New Lantao Bus Company Limited</li> </ul>	Y
stop_id	Path	Stop ID of the respective company  <u>Note:</u>  For CTB and NWFBS, refer to “Stop” API and “Route-Stop” API of the following datasets: <ul style="list-style-type: none"> <li>• <i>Real-time “Next Bus” arrival</i></li> </ul>	Y

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		<p><i>time and related data of Citybus</i></p> <ul style="list-style-type: none"> <li><i>Real-time “Next Bus” arrival time and related data of New World First Bus</i></li> </ul> <p>For NLB, refer to the “Stops of a route” API of the following dataset:</p> <ul style="list-style-type: none"> <li><i>Bus service of New Lantao Bus Company (1973) Limited dataset</i></li> </ul>	
lang	Query String	<p>Language of the returned data</p> <p>Valid languages are:</p> <ul style="list-style-type: none"> <li>en – English (default if not specified)</li> <li>zh-hant – Traditional Chinese</li> <li>zh-hans – Simplified Chinese</li> </ul>	N

Sample Request:

```
/v1/transport/batch/stop-route/CTB/001001
```

HTTP Response:

<b>Response Format</b>	JSON
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Response Code	Response
200	Success, see sample response below
422	Varies, see message in response body
429	Processing too many requests
500	Internal server error

Sample Response:

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```
{
  "type": "StopRoute",
  "version": "1.0",
  "generated_timestamp": "2019-10-14T15:24:17+08:00",
  "data": [
    {
      "co": "CTB",
      "dir": "O",
      "overnightRoute": null,
      "route": "12",
      "routeId": null,
      "routeName": null,
      "seq": 11,
      "specialRoute": null,
      "stop": "001001",
      "data_timestamp": "2019-10-14T11:25:54+08:00"
    },
    {
      "co": "CTB",
      "dir": "O",
      "overnightRoute": null,
      "route": "12M",
      "routeId": null,
      "routeName": null,
      "seq": 6,
      "specialRoute": null,
      "stop": "001001",
      "data_timestamp": "2019-10-14T11:25:54+08:00"
    },
    {
      "co": "CTB",
      "dir": "I",
      "overnightRoute": null,
      "route": "40M",
      "routeId": null,
      "routeName": null,
      "seq": 10,
      "specialRoute": null,
      "stop": "001001",
      "data_timestamp": "2019-10-14T11:25:54+08:00"
    }
  ]
}
```

Note: Refer to the data dictionary for the descriptions and specifications of the returned fields.

### 3. Stop-ETA API

**Description:** This API takes a company ID and its respective stop ID and returns all the ETA data of the specified stop.

**HTTP Request:**

<b>Endpoint</b>	/v1/transport/batch/stop-eta/{company_id}/{stop_id}
<b>HTTP Method</b>	GET

Parameter	Parameter Type	Description	Required
company_id	Path	Company ID  Valid company IDs are: <ul style="list-style-type: none"> <li>• CTB - Citybus Limited</li> <li>• NWFB - New World First Bus Service Limited</li> <li>• NLB - New Lantao Bus Company Limited</li> </ul>	Y
stop_id	Path	Stop ID of the respective company  <u>Note:</u>  For CTB and NWFB, refer to “Stop” API and “Route-Stop” API of the following datasets: <ul style="list-style-type: none"> <li>• <i>Real-time “Next Bus” arrival time and related data of Citybus</i></li> <li>• <i>Real-time “Next Bus” arrival time and related data of New World First Bus</i></li> </ul> For NLB, refer to the “Stops of a route” API of the following dataset: <ul style="list-style-type: none"> <li>• <i>Bus service of New Lantao Bus Company (1973) Limited</i></li> </ul>	Y

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		<i>dataset</i>	
lang	Query String	Language of the returned data  Valid languages are: <ul style="list-style-type: none"> <li>• en – English (default if not specified)</li> <li>• zh-hant – Traditional Chinese</li> <li>• zh-hans – Simplified Chinese</li> </ul>	N

Sample Request:

```
/v1/transport/batch/stop-eta/nlb/1?lang=zh-hant
```

**HTTP Response:**

<b>Response Format</b>	JSON
------------------------	------

<b>Response Code</b>	<b>Response</b>
200	Success, see sample response below
422	Varies, see message in response body
429	Processing too many requests
500	Internal server error
502	Invalid response from upstream server

Sample Response:

```
{
  "type": "StopETA",
  "version": "1.0",
  "generated_timestamp": "2019-10-14T15:23:04+08:00",
  "data": [
    {
      "co": "NWFB",
```



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```
        "route": "13",
        "dir": "O",
        "seq": 6,
        "stop": "001001",
        "dest": "Kotewall Road",
        "eta_seq": 1,
        "eta": "2019-10-14T15:34:06+08:00",
        "rmk": "",
        "routeVariantName": null,
        "departed": null,
        "noGPS": null,
        "wheelChair": null,
        "data_timestamp": "2019-10-14T15:22:02+08:00"
    },
    {
        "co": "NWFB",
        "route": "13",
        "dir": "O",
        "seq": 6,
        "stop": "001001",
        "dest": "Kotewall Road",
        "eta_seq": 2,
        "eta": "2019-10-14T15:48:37+08:00",
        "rmk": "",
        "routeVariantName": null,
        "departed": null,
        "noGPS": null,
        "wheelChair": null,
        "data_timestamp": "2019-10-14T15:22:02+08:00"
    },
    {
        "co": "NWFB",
        "route": "13",
        "dir": "O",
        "seq": 6,
        "stop": "001001",
        "dest": "Kotewall Road",
        "eta_seq": 3,
        "eta": "2019-10-14T16:03:37+08:00",
        "rmk": "",
        "routeVariantName": null,
        "departed": null,
        "noGPS": null,
        "wheelChair": null,
        "data_timestamp": "2019-10-14T15:22:02+08:00"
    }
}
]
```

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Note: Refer to the data dictionary for the descriptions and specifications of the returned fields.

## 4. Error Response

In case of 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
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### Sample Response:

```
{
  "code": "422",
  "message": "Invalid language code"
}
```