Green Minibus Real-Time Arrival Information System

API Specifications

Version 1.1

November 2021

Content

Amendment History

Version	Revision Details	Revision Date
1.0	Initial release	December 2020
1.1	Revised on Route API	November 2021

Glossary

In this specification, we use the following glossaries:

Glossary	Description
CRS	Coordinate Reference System
GMB	Green Minibus
Region	Different regions that the route belongs to, i.e. **HKI**: Hong Kong Island **KLN**: Kowloon **NT**: New Territories
Route Code	The route name for identifying the Green Minibus (GMB) route. Route name is unique within the region but not among all regions.
Route ID	An unique identifier for a route
Route Sequence	Can be 1 or 2. Representing different directions under the same Route ID. For a circular route, it is represented by 1.
Stop ID	An unique identifier for a GMB Stop. A stop may have different names under different routes but the geographic coordinates are guaranteed to be the same.
tc, sc, en	Suffix after the key of free text fields – Languages of the free text tc: Traditional Chinese sc: Simplified Chinese en: English

Response Format

All HTTP responses are in JSON type with header `Content-Type: application/json`

General Fields in Wrapper

Field	Type	Description
Type	string	Entity Name which is specified under different payload
Version	string	API Version of the response
generated_timestamp	timestamp	The time when the response is generated, in Hong Kong Time (HKT)

data	any	The data requested

Sample Response

```
{
    "type": "Route",
    "version": "1.0",
    "generated_timestamp": "2020-10-06T11:22:54.072+08:00",
    "data": <Payload Data Goes Here>
}
```

API Base URL

All API requests should be sent to `https://data.etagmb.gov.hk`

1. Route Listing API

Description

This API returns arrays of GMB routes (in route code) that support real-time arrival information, and group by region. An optional region parameter is accepted for only returning the routes in that specific region.

Endpoint

GET /route/{region}?

Request

Parameters

Field	Data type	Description	Value	Required
region	Path	Region abbreviations	**NT** - New Territories **KLN** - Kowloon **HKI** - Hong Kong Island	N

Response

Status Code

Status Code	Description
200 OK	The request is successfully performed
500	The request is not valid

Body

when region is specified

Entity Name: Routes-Regional

Field	Data type	Description
data	Object	An object holding route code list of the region and the last updated timestamp
data.routes	string[]	An array of Route Code for the specified region
data.data_timstamps	timestamp	Last updated timestamp of Route List

*when region is **NOT** specified*

Entity Name: `Routes-All`

Field	Data type	Description
`data`	`Object`	An object holding route list and last updated timestamp
`data.routes`	`Routes`	An object with all regions as the keys
`data.data_timestamp`	`timestamp`	Last updated timestamp of Route List

`Routes.HKI`
`Routes.KLN`
`Routes.NT`
	`string[]`	An array of Route Code for the concerned region

Sample Request and Response

when region is specified

GET /route/HKI

```
{
  "type": "Routes-Regional",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T11:23:23.381+08:00",
  "data": {
    "routes": [
      "1",
      "10",
      ...
    ],
    "data_timestamp": "2020-12-22T11:27:48.705+08:00"
  }
}
```

*when region is **NOT** specified*

GET /route

```
{
  "type": "Routes-All",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T11:14:21.326+08:00",
  "data": {
    "routes": {
      "HKI": [
        "1",
        "10",
        ...
      ],
      "NT": [
        "1",
        "101M",
        ...
```

```
    ],
    "KLN": [
      "12",
      "12A",
      ...
    ]
  },
  "data_timestamp": "2020-12-22T11:27:48.705+08:00"
}
```

2. Route API

Description

This API accepts region and route code and returns the respective route information

Endpoint

Using (region, route_code) Tuple	**GET** /route/{region}/{route_code}
Using route_id	**GET** /route/{route_id}

Request

Parameters

Using (region, route_code) Tuple

Field	Data type	Description	Required
region	Path	Region name abbreviations	Y
route_code	Path	Route code	Y

Using route_id

Field	Data type	Description	Required
route_id	Path	Route ID	Y

Response

Status Code

Status code	Description
200 OK	The request is successfully performed

Body

Entity Name: `Route`

Field	Data type	Description
`data`	`Route[]`	An array with different variation and direction of a specified route code
`Route.region`	`string`	Region name abbreviations
`Route.route_code`	`string`	Route code
`Route.route_id`	`integer`	An unique identifier for the route

`Route.description_tc`
`Route.description_sc`
`Route.description_en`
	`string`	Description of the variation of route

`Route.data_timestamp`	`timestamp`	Last updated timestamp of Route
`Route.directions`	`Direction[]`	Different directions of the variation, for one way service or circular, there is 1 direction
`Direction.route_seq`	`integer`	Route Sequence

`Direction.orig_tc`
`Direction.orig_sc`
`Direction.orig_en`
	`string`	Name of Origin of the Direction

`Direction.dest_tc`
`Direction.dest_sc`
`Direction.dest_en`
	`string`	Name of Destination of the Direction

`Direction.remarks_tc`
`Direction.remarks_sc`
`Direction.remarks_en`
	`string|null`	Remarks for service amendment

`Direction.data_timestamp`	`timestamp`	Last updated timestamp of Direction
`Direction.headways`	`Headway[]`	Headway of a direction
`Headway.weekdays`	`boolean[]`	Boolean flag array for the weekdays that the headway applicable (Start from Monday)

`Headway.public_holiday`	`boolean`	Boolean flag indicating whether the headway is applicable to public holiday
`Headway.headway_seq`	`integer`	Presentation sequence for the headway
`Headway.start_time`	`time`	Start time for the headway
`Headway.end_time`	`time|null`	End time for the headway, null if single trip headway
`Headway.frequency`	`integer|null`	Headway Frequency, null if single trip headway
`Headway.frequency_upper`	`integer|null`	Headway Frequency (Upper Bound) (if applicable)

Sample Request and Response

GET /route/HKI/69

```
{
  "type": "Route",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:07:55.373+08:00",
  "data": [
    {
      "region": "HKI",
      "route_code": "69",
      "route_id": 2000410,
      "description_tc": "正常班次",
      "description_sc": "正常班次",
      "description_en": "Normal Schedule",
      "directions": [
        {
          "route_seq": 1,
          "orig_tc": "數碼港",
          "orig_sc": "数码港",
          "orig_en": "Cyberport",
          "dest_tc": "鰂魚涌(船塢里)(循環線)",
          "dest_sc": "鲫鱼涌(船坞里)(循环线)",
          "dest_en": "Quarry Bay (Shipyard Lane) (Circular)",
          "remarks_tc": null,
          "remarks_sc": null,
          "remarks_en": null,
          "headways": [
            {
              "weekdays": [true, true, true, true, true, false, false],
              "public_holiday": false,
              "headway_seq": 1,
              "start_time": "06:30:00",
              "end_time": "07:00:00",
```

```
          "frequency": 15,
          "frequency_upper": null
        },
        {
          "weekdays": [true, true, true, true, true, false, false],
          "public_holiday": false,
          "headway_seq": 2,
          "start_time": "09:00:00",
          "end_time": "10:00:00",
          "frequency": 15,
          "frequency_upper": null
        },
        ...
        {
          "weekdays": [false, false, false, false, false, false, true],
          "public_holiday": true,
          "headway_seq": 14,
          "start_time": "16:00:00",
          "end_time": "20:00:00",
          "frequency": 20,
          "frequency_upper": null
        }
      ],
      "data_timestamp": "2020-12-23T12:59:10.918+08:00"
    }
  ],
  "data_timestamp": "2020-12-23T12:59:10.918+08:00"
},
{
  "route_id": 2000939,
  "description_tc": "北角站起載特別班次",
  "description_sc": "北角站起载特别班次",
  "description_en": "Special Departure from North Point Station",
  "directions": [
    {
      "route_seq": 1,
      "orig_tc": "北角港鐵站",
      "orig_sc": "北角港铁站",
      "orig_en": "North Point MTR Station",
      "dest_tc": "數碼港",
      "dest_sc": "数码港",
      "dest_en": "Cyberport",
      "remarks_tc": null,
      "remarks_sc": null,
      "remarks_en": null,
      "headways": [
        {
          "weekdays": [true, true, true, true, true, true, false],
          "public_holiday": false,
          "headway_seq": 1,
          "start_time": "07:50:00",
          "end_time": null,
          "frequency": null,
          "frequency_upper": null
        }
      ],
      "data_timestamp": "2020-12-17T10:26:50.173+08:00"
```

```
        }
      ],
      "data_timestamp": "2020-12-17T10:26:50.173+08:00"
    },
    {
      "route_id": 2000963,
      "description_tc": "經黃竹坑道天橋",
      "description_sc": "经黄竹坑道天桥",
      "description_en": "via Wong Chuk Hang Road Flyover",
      "directions": [
        {
          "route_seq": 1,
          "orig_tc": "數碼港",
          "orig_sc": "数码港",
          "orig_en": "Cyberport",
          "dest_tc": "鰂魚涌(船塢里)(循環線)",
          "dest_sc": "鲗鱼涌(船坞里)(循环线)",
          "dest_en": "Quarry Bay (Shipyard Lane) (Circular)",
          "remarks_tc": null,
          "remarks_sc": null,
          "remarks_en": null,
          "headways": [
            {
              "weekdays": [true, true, true, true, true, false, false],
              "public_holiday": false,
              "headway_seq": 1,
              "start_time": "07:00:00",
              "end_time": "09:00:00",
              "frequency": 15,
              "frequency_upper": null
            },
            {
              "weekdays": [true, true, true, true, true, false, false],
              "public_holiday": false,
              "headway_seq": 2,
              "start_time": "17:00:00",
              "end_time": "19:00:00",
              "frequency": 15,
              "frequency_upper": null
            }
          ],
          "data_timestamp": "2020-12-23T11:42:15.981+08:00"
        }
      ],
      "data_timestamp": "2020-12-23T11:42:15.981+08:00"
    }
  ]
}
```

3. Stop API

Description

This API takes GMB Stop ID and returns the corresponding coordinates of the GMB Stop.

Endpoint

`GET` `/stop/{stop_id}`

Request

Parameters

Field	Data type	Description	Required
`stop_id`	Path	Stop ID	Y

Response

Status Code

Status code	Description
`200 OK`	The request is successfully performed
`404 Not Found`	The requested `stop_id` is not found

Body

Entity Name: `Stop`

Field	Data type	Description
`data`	`Stop`	Stop Details
`Stop.coordinates`	`CRS`	Stop position in different Coordinate Reference System (CRS)
`CRS.wgs84` `CRS.hk80`	`Coordinates`	Different CRS
`Coordinates.latitude` `Coordinates.longitude`	`number`	Latitude and Longitude of the stop
`Stop.enabled`	`boolean`	`true` if the stop is in service; otherwise, `false`

`Stop.remarks_tc`
`Stop.remarks_sc`
`Stop.remarks_en`
	`string|null`	Remarks for service amendment, `null` if enabled is `true`

`Stop.data_timestamp`	`timestamp`	Last updated timestamp of Stop

Sample Request and Response

`GET` `/stop/20003337`

```
{
```

```
  "type": "Stop",
  "version": "1.0",
  "generated_timestamp": "2020-10-07T09:53:17.114+08:00",
  "data": {
    "coordinates": {
      "wgs84": { "latitude": 22.261913456129104, "longitude": 114.13014951276878 },
      "hk80": { "latitude": 813678.9998333427, "longitude": 831452.0004168812 }
    },
    "enabled": true,
    "remarks_tc": null,
    "remarks_sc": null,
    "remarks_en": null,
    "data_timestamp": "2020-09-24T16:19:19.858+08:00"
  }
}
```

4. Route-Stop API

Description

This API takes GMB Route ID and Route Sequence and returns the stop list of the corresponding route

Endpoint

GET /route-stop/{route_id}/{route_seq}

Request

Parameters

Field	Data type	Description	Required
route_id	Path	Route ID	Y
route_seq	Path	Route Sequence	Y

Response

Status Code

Status code	Description
200 OK	The request is successfully performed

Body

Entity Name: Route-Stop

Field	Data type	Description
data	object	An object holding list of route-stop and last updated timestamp

data.data_timestamp	timestamp	Last Updated Time of Route-Stops
data.route_stops	RouteStop[]	An array of route-stop
RouteStop.stop_seq	integer	Stop Sequence
RouteStop.stop_id	integer	Stop ID
RouteStop.name_tc RouteStop.name_sc RouteStop.name_en	string	Stop Name

Sample Request and Response

GET /route-stop/2000410/1

```
{
  "type": "Route-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T14:51:23.258+08:00",
  "data": {
    "route_stops": [
      {
        "stop_seq": 1,
        "stop_id": 20003337,
        "name_tc": "數碼港公共運輸交匯處",
        "name_sc": "数码港公共运输交汇处",
        "name_en": "Cyberport Public Transport Interchange"
      },
      {
        "stop_seq": 2,
        "stop_id": 20007719,
        "name_tc": "數碼港道, 資訊道",
        "name_sc": "数码港道, 资讯道",
        "name_en": "Information Crescent, Cyberport Road"
      },
      ...
      {
        "stop_seq": 42,
        "stop_id": 20003337,
        "name_tc": "數碼港公共運輸交匯處",
        "name_sc": "数码港公共运输交汇处",
        "name_en": "Cyberport Public Transport Interchange"
      }
    ],
    "data_timestamp": "2020-12-23T13:23:09.065+08:00"
  }
}
```

5. Stop-Route API

Description

This API takes Stop ID returns the route list of the corresponding stop

Endpoint

GET /stop-route/{stop_id}

Request

Parameters

Field	Data type	Description	Required
stop_id	Path	Stop ID	Y

Response

Status Code

Status code	Description
200 OK	The request is successfully performed

Body

Entity Name: Stop-Route

Field	Data type	Description
data	Route[]	An array of route variations
Route.route_id	integer	Route ID
Route.route_seq	integer	Route Sequence
Route.stop_seq	integer	Stop Sequence under the route
Route.name_tc Route.name_sc Route.name_en	string	Stop name in the route

Sample Request and Response

GET /stop-route/20002493

```
{
  "type": "Stop-Route",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:13:24.880+08:00",
  "data": [
    {
      "route_id": 2000410,
      "route_seq": 1,
      "stop_seq": 6,
      "name_tc": "域多利道，近免疫學研究院",
      "name_sc": "域多利道，近免疫学研究院",
      "name_en": "Victoria Road, near Department Of Health Institute Of
Immunology"
```

```
    },
    {
      "route_id": 2000511,
      "route_seq": 1,
      "stop_seq": 6,
      "name_tc": "域多利道，近免疫學研究院",
      "name_sc": "域多利道，近免疫学研究院",
      "name_en": "Victoria Road, near Department Of Health Institute Of
Immunology"
    },
    {
      "route_id": 2000963,
      "route_seq": 1,
      "stop_seq": 6,
      "name_tc": "域多利道，近免疫學研究院",
      "name_sc": "域多利道，近免疫学研究院",
      "name_en": "Victoria Road, near Department Of Health Institute Of
Immunology"
    }
  ]
}
```

6. Route-Stop ETA API

Description

This API takes GMB Route ID, Route Sequence and Stop Sequence and returns the ETA list of the corresponding route

Endpoint

GET /eta/route-stop/{route_id}/{route_seq}/{stop_seq}
GET /eta/route-stop/{route_id}/{stop_id}

Request

Parameters

Query by (route id, route seq, stop seq)

Field	Data type	Description	Required
route_id	Path	Route ID	Y
route_seq	Path	Route Sequence	Y
stop_seq	Path	Stop Sequence	Y

Query by (route id, stop id)

Field	Data type	Description	Required
route_id	Path	Route ID	Y

stop_id	Path	Stop ID		Y

Response

Status Code

Status code	Description
200 OK	The request is successfully performed
404 Not Found	The combination of parameters is not Found

Body

Entity Name: ETA-Route-Stop

When ETA is enabled; Query by (route_id, route_seq, stop_seq)

Field	Data type	Description
data.enabled	boolean	Whether the ETA service is enabled for this route-stop combination
data.stop_id	integer	Stop ID
data.eta	ETA[]	ETA List
ETA.eta_seq	integer	Order of the ETA Entries
ETA.diff	integer	Estimated Time of Arrival in Relative Minute
ETA.timestamp	timestamp	Estimated Time of Arrival in Absolute
ETA.remarks_tc ETA.remarks_sc ETA.remarks_en	string	Special message about the ETA

When ETA is enabled; Query by (route_id, stop_id)

Field	Data type	Description
data	Stop[]	Occurrences of the stop along the route
Stop.enabled	boolean	Whether the ETA service is enabled for this route-stop combination
Stop.route_seq	integer	Route Sequence
Stop.stop_seq	integer	Stop Sequence
Stop.eta	ETA[]	ETA List

`ETA.eta_seq`	`integer`	Order of the ETA Entries
`ETA.diff`	`integer`	Estimated Time of Arrival in Relative Minute
`ETA.timestamp`	`timestamp`	Estimated Time of Arrival in Absolute

`ETA.remarks_tc`
`ETA.remarks_sc`
`ETA.remarks_en`
	`string`	Special message about the ETA

When ETA is disabled; Query by (route_id, route_seq, stop_seq)

Field	Data type	Description
`data.enabled`	`boolean`	Whether the ETA service is enabled for this route-stop combination
`data.stop_id`	`integer`	Stop ID

`data.description_tc`
`data.description_sc`
`data.description_en`
	`string`	Reason of ETA service unavailable

When ETA is disabled; Query by (route_id, stop_id)

Field	Data type	Description
`data`	`Stop[]`	Occurrences of the stop along the route
`Stop.enabled`	`boolean`	Whether the ETA service is enabled for this route-stop combination
`Stop.route_seq`	`integer`	Route Sequence
`Stop.stop_seq`	`integer`	Stop Sequence

`Stop.description_tc`
`Stop.description_sc`
`Stop.description_en`
	`string`	Reason of ETA service unavailable

Sample Request and Response

When ETA is enabled; Query by (route_id, route_seq, stop_seq)

GET `/eta/route-stop/2000410/1/1`

```
{
  "type": "ETA-Route-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:14:08.595+08:00",
```

```
  "data": {
    "enabled": true,
    "stop_id": 20003337,
    "eta": [
      {
        "eta_seq": 1,
        "diff": 6,
        "timestamp": "2020-12-28T15:20:00.000+08:00",
        "remarks_tc": null,
        "remarks_sc": null,
        "remarks_en": null
      },
      {
        "eta_seq": 2,
        "diff": 26,
        "timestamp": "2020-12-28T15:40:00.000+08:00",
        "remarks_tc": "未開出",
        "remarks_sc": "未开出",
        "remarks_en": "Scheduled"
      },
      {
        "eta_seq": 3,
        "diff": 46,
        "timestamp": "2020-12-28T16:00:00.000+08:00",
        "remarks_tc": "未開出",
        "remarks_sc": "未开出",
        "remarks_en": "Scheduled"
      }
    ]
  }
}
```

When ETA is enabled; Query by (route_id, stop_id)

GET /eta/route-stop/2000520/20003198

```
{
  "type": "ETA-Route-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:15:35.698+08:00",
  "data": [
    {
      "enabled": true,
      "route_seq": 1,
      "stop_seq": 1,
      "eta": [
        {
          "eta_seq": 1,
          "diff": 4,
          "timestamp": "2020-12-28T15:20:00.000+08:00",
          "remarks_tc": null,
          "remarks_sc": null,
          "remarks_en": null
        },
        {
          "eta_seq": 2,
          "diff": 24,
```

```json
      "timestamp": "2020-12-28T15:40:00.000+08:00",
      "remarks_tc": "未開出",
      "remarks_sc": "未开出",
      "remarks_en": "Scheduled"
    },
    {
      "eta_seq": 3,
      "diff": 44,
      "timestamp": "2020-12-28T16:00:00.000+08:00",
      "remarks_tc": "未開出",
      "remarks_sc": "未开出",
      "remarks_en": "Scheduled"
    }
  ]
},
{
  "enabled": true,
  "route_seq": 1,
  "stop_seq": 42,
  "eta": [
    {
      "eta_seq": 1,
      "diff": 51,
      "timestamp": "2020-12-28T16:06:58.190+08:00",
      "remarks_tc": "未開出",
      "remarks_sc": "未开出",
      "remarks_en": "Scheduled"
    },
    {
      "eta_seq": 2,
      "diff": 71,
      "timestamp": "2020-12-28T16:26:58.190+08:00",
      "remarks_tc": "未開出",
      "remarks_sc": "未开出",
      "remarks_en": "Scheduled"
    },
    {
      "eta_seq": 3,
      "diff": 91,
      "timestamp": "2020-12-28T16:46:58.190+08:00",
      "remarks_tc": "未開出",
      "remarks_sc": "未开出",
      "remarks_en": "Scheduled"
    }
  ]
}
  ]
}
```

When ETA is disabled; Query by (route id, route seq, stop seq)

GET /eta/route-stop/2000802/1/1

```json
{
  "type": "ETA-Route-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:21:24.401+08:00",
```

```
  "data": {
    "enabled": false,
    "stop_id": 20003337,
    "description_tc": "<到站預報暫停原因>",
    "description_sc": "<到站預報暫停原因>",
    "description_en": "<Reason of ETA Service Unavailable>"
  }
}
```

When ETA is disabled; Query by (`route_id`, `stop_id`)

GET /eta/route-stop/2000802/20003198

```
{
  "type": "ETA-Route-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:20:19.483+08:00",
  "data": [
    {
      "enabled": false,
      "route_seq": 1,
      "stop_seq": 1,
      "description_tc": "<到站預報暫停原因>",
      "description_sc": "<到站预报暂停原因>",
      "description_en": "<Reason of ETA Service Unavailable>"
    },
    {
      "enabled": false,
      "route_seq": 2,
      "stop_seq": 10,
      "description_tc": "<到站預報暫停原因>",
      "description_sc": "<到站预报暂停原因>",
      "description_en": "<Reason of ETA Service Unavailable>"
    }
  ]
}
```

7. Stop ETA API

Description

This API takes Stop ID returns the ETA list of the corresponding stop

Endpoint

GET /eta/stop/{stop_id}

Request

Parameters

Field	Data type	Description	Required
stop_id	Path	Stop ID	Y

Status code	Description
`200 OK`	The request is successfully performed

Body

Entity Name: `ETA-Stop`

Field	Data type	Description
`data`	`Route[]`	An array of route variations
`Route.enabled`	`boolean`	Whether the ETA service is enabled for this route-stop combination
`Route.route_id`	`integer`	Route ID
`Route.route_seq`	`integer`	Route Sequence
`Route.stop_seq`	`integer`	Stop Sequence

`Route.description_tc`
`Route.description_sc`
`Route.description_en`
	`string`	Reason of ETA service unavailable (when enabled is `false`)

`Route.eta`	`ETA[]`	ETA List (when enabled is `true`)
`ETA.eta_seq`	`integer`	Order of the ETA Entries
`ETA.diff`	`integer`	Estimated Time of Arrival in Relative Minute
`ETA.timestamp`	`timestamp`	Estimated Time of Arrival in Absolute

`ETA.remarks_tc`
`ETA.remarks_sc`
`ETA.remarks_en`
	`string`	Special message about the ETA

Sample Request and Response

GET `/eta/stop/20003337`

```
{
  "type": "ETA-Stop",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T15:29:36.167+08:00",
  "data": [
    {
      "enabled": true,
      "route_id": 2000410,
```

```
      "route_seq": 1,
      "stop_seq": 42,
      "eta": [
        {
          "eta_seq": 1,
          "diff": 42,
          "timestamp": "2020-12-28T16:11:47.783+08:00",
          "remarks_tc": null,
          "remarks_sc": null,
          "remarks_en": null
        },
        {
          "eta_seq": 2,
          "diff": 57,
          "timestamp": "2020-12-28T16:26:58.190+08:00",
          "remarks_tc": "未開出",
          "remarks_sc": "未开出",
          "remarks_en": "Scheduled"
        },
        {
          "eta_seq": 3,
          "diff": 77,
          "timestamp": "2020-12-28T16:46:58.190+08:00",
          "remarks_tc": "未開出",
          "remarks_sc": "未开出",
          "remarks_en": "Scheduled"
        }
      ]
    },
    {
      "enabled": false,
      "route_id": 2000802,
      "route_seq": 1,
      "stop_seq": 1,
      "description_tc": "<到站預報暫停原因>",
      "description_sc": "<到站预报暂停原因>",
      "description_en": "<Reason of ETA Service Unavailable>"
    },
    {
      "enabled": true,
      "route_id": 2000963,
      "route_seq": 1,
      "stop_seq": 1,
      "eta": []
    }
  ]
}
```

8. Last Update API

Description

This API takes parameters according to the requested entity and respond the last updated time of the queried data.

Endpoints

GET /last-update/route

GET /last-update/stop

GET /last-update/route-stop

GET /last-update/route/{region}

GET /last-update/route/{region}/{route_code}

GET /last-update/route/{route_id}

GET /last-update/route/{route_id}/{route_seq}

GET /last-update/stop/{stop_id}

GET /last-update/route-stop/{route_id}/{route_seq}

Request

Parameters

Field	Data type	Description
region	Path	HKI, KLN, NT
route_code	Path	Route Code
route_id	Path	Route ID
route_seq	Path	Route Sequence
stop_id	Path	Stop ID

Response

Status Code

Status code	Description
200 OK	The request is successfully performed
404 Not Found	The queried data is not found

Body

Entity Name: Last-Update

Last Update Date of single object

Field	Data type	Description
data	object	Object holding the timestamp
data.last_update_date	timestamp	Last updated timestamp of the queried data

Last Update Date of Routes

Field	Data type	Description
data_timestamp	Route[]	Routes
Route.route_id	integer	Route ID
Route.route_seq	integer	Route Sequence
Route.last_update_date	timestamp	Last updated timestamp of the Route

Last Update Date of Stops

Field	Data type	Description
data_timestamp	Stop[]	Stops
Stop.stop_id	integer	Stop ID
Stop.last_update_date	timestamp	Last updated timestamp of the Stop

Sample Request and Response

GET /last-update/route

GET /last-update/route/HKI

GET /last-update/route/HKI/69

GET /last-update/route-stop

```
{
  "type": "Last-Update",
  "version": "1.0",
  "generated_timestamp": "2020-11-25T10:34:10.082+08:00",
  "data": {
    "data_timestamp": [
      {
        "route_id": 2000150,
        "route_seq": 1,
        "last_update_date": "2020-09-24T08:33:19.519+08:00"
      },
      {
        "route_id": 2000150,
        "route_seq": 2,
        "last_update_date": "2020-09-24T08:33:19.519+08:00"
      },
      …
    ]
  }
}
```

GET /last-update/stop

```
{
  "type": "Last-Update",
```

```
  "version": "1.0",
  "generated_timestamp": "2020-11-25T10:34:10.082+08:00",
  "data": {
    "data_timestamp": [
      {
        "stop_id": 20000849,
        "last_update_date": "2020-09-24T08:24:45.401+08:00"
      },
      {
        "stop_id": 20003237,
        "last_update_date": "2020-09-24T08:24:45.401+08:00"
      },
      …
    ]
  }
}
```

GET /last-update/stop/20003075

GET /last-update/route-stop/2000410/1

```
{
  "type": "Last-Update",
  "version": "1.0",
  "generated_timestamp": "2020-12-28T16:49:26.877+08:00",
  "data": {
    "last_update_date": "2020-12-23T13:23:09.065+08:00"
  }
}
```