REST API

The REST API provides simple interfaces to most of the data available on www.i-traffic.co.za. The REST API enables developers to access essential data on i-TRAFFIC including Travel Times, Traffic Speeds, Incidents, Roadwork, and Cameras. This API enables developers to create mobile traffic apps for South Africa.

The following outlines the resources available via the www.i-traffic.co.za API.

Resource	Description
GetMainlineRoutes	Returns the route configuration and status in the www.i-traffic.co.za system. This includes travel time and average speed for interchange to interchange freeway segments updated every 60 seconds.
GetMainlineLinks	Returns the configuration and status of Vehicle Detector Station links within the www.i-traffic.co.za system. This is defined as the portion of roadway between two vehicle detectors on a roadway.
GetAlerts	Returns a list of Alerts. These are also known as Floodgates and are the high priority messages scrolling across the header of the www.i-traffic.co.za website.
GetIncidents	Returns all active incidents. This data is updated every minute.
GetRoadConditions	Returns all active road condition events.
GetRoadways	Returns a list of roadways that are configured within the www.i-traffic.co.za system.
GetRoadwork	Returns all active or planned roadwork. This data is updated every minute.
GetMessageSigns	Returns the configuration and status of all message signs within the www.i-traffic.co.za system.
GetCameras	Returns the configuration of all cameras in the www.i-traffic.co.za system.
GetCameraImage	Returns the image for a specific camera if it exists. This method requires a camera ID.

GetMainlineRoutes
Resource URL
https://www.i-traffic.co.za/api/MainlineRoutes?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters
Key - required
Format - Optional

Example Request
https://www.i-traffic.co.za/api/mainlineroutes?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetMainlineLinks
Resource URL
https://www.i-traffic.co.za/api/MainlineLinks?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/mainlinelinks?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetAlerts
Resource URL

https://www.i-traffic.co.za/api/alerts?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/alerts?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetIncidents
Resource URL

https://www.i-traffic.co.za/api/Incidents?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/incidents?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetRoadConditions
Resource URL

https://www.i-traffic.co.za/api/roadconditions?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/roadconditions?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetRoadways
Resource URL

https://www.i-traffic.co.za/api/roadways?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/roadways?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetRoadwork
Resource URL

https://www.i-traffic.co.za/api/Roadwork?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required

Format - Optional

Example Request

https://www.i-traffic.co.za/api/roadwork?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetMessageSigns
Resource URL

https://www.i-traffic.co.za/api/MessageSigns?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required
Format - Optional

Example Request

https://www.i-traffic.co.za/api/messagesigns?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetCameras
Resource URL

https://www.i-traffic.co.za/api/cameras?key={key}&format={format}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required
Format - Optional

Example Request

https://www.i-traffic.co.za/api/cameras?key=4114551d2d4a403a921eab1c4c22ec8b&format=xml

GetCameraImage
Resource URL

https://www.i-traffic.co.za/api/cameraimage?key={key}&format={format}&cameraID={cameraID}&networkId={networkID}

Resource Information

Rate Limited?	Yes
Requires Authentication	Yes
Response Formats	json or xml
Http Methods	GET

Parameters

Key - required
Format - Optional
cameraID - required
networkID - required

Example Request

https://www.i-traffic.co.za/api/cameraimage?
key=4114551d2d4a403a921eab1c4c22ec8b&format=xml&cameraID=5&NetwordID=District07

Things to know about the REST API

Entirely HTTP-Based Methods to retrieve data from the www.i-traffic.co.za API require a GET request. API Methods that require a particular HTTP method will return an error if you do not make your request with the correct one.

The API is a RESTful resource

The www.i-traffic.co.za API attempts to conform to the design principles of Representational State Transfer (REST). Simply change the format extension a request to get results in the format of your choice. The API presently supports the following data formats: XML and JSON.

Rate Limiting

API usage is rate limited to protect www.i-traffic.co.za from abuse. Authenticated calls are limited to 1 requests per minute for each method.

Knowing if you are rate limited

If you are being rate-limited by the REST API it will receive HTTP 400 response codes.

Error Codes & Responses

HTTP Status Codes

The www.i-traffic.co.za API attempts to return appropriate HTTP status codes for every request. The following are the codes that may be returned:

- **200 OK:** Success!
- **400 Bad Request:** The request was invalid. An accompanying error message will explain why. This is the status code that will be returned during rate limiting and if an invalid key is used.
- **403 Forbidden:** The request is understood, but it has been refused.
- **404 Not Found:** The URI requested is invalid or the resource requested does not exist.
- **500 Internal Server Error:** Something is broke. Please contact the customer feedback to report this issue so the www.i-traffic.co.za team can investigate
- **503 Service Unavailable:** The www.i-traffic.co.za servers are up, but overloaded with requests. Try again later.

Error Messages

When the www.i-traffic.co.za API returns error messages, it does so in XML format.