Get Traffic Incidents

05/21/2024

① Note

Bing Maps Get Traffic Incidents API retirement

Bing Maps Get Traffic Incidents API is deprecated and will be retired. Free (Basic) account customers can continue to use Bing Maps Get Traffic Incidents API until June 30th, 2025. Enterprise account customers can continue to use Bing Maps Get Traffic Incidents API until June 30th, 2028. To avoid service disruptions, all implementations using Bing Maps Get Traffic Incidents API will need to be updated to use Azure Maps Get Traffic Incident Detail API by the retirement date that applies to your Bing Maps for Enterprise account type. For detailed migration guidance, see Migrate Bing Maps Get Traffic Incidents API.

Azure Maps is Microsoft's next-generation maps and geospatial services for developers. Azure Maps has many of the same features as Bing Maps for Enterprise, and more. To get started with Azure Maps, create a free <u>Azure subscription</u> and an <u>Azure Maps account</u>. For more information about azure Maps, see <u>Azure Maps Documentation</u>. For migration guidance, see <u>Bing Maps Migration Overview</u>.

Use the following URL template to request traffic incident information. A collection of traffic incidents is returned in the response.

For more information about the traffic incident data that is returned in the response, see Traffic Incident Data. You can also view the example URL and response values in the Examples section below. For an overview of how traffic incident information is returned by Bing Maps REST Services, see Getting Traffic Incident Data.

For traffic coverage by country/region, see Bing Maps Geographic Coverage.

Supported HTTP Methods

GET

URL Templates

① Note

These templates support both HTTP and HTTPS protocols. To use this API, you must have a <u>Bing Maps Key</u>.

Get traffic incidents.

url

http://dev.virtualearth.net/REST/v1/Traffic/Incidents/{mapArea}/?severity=
{severity1,severity2,severityN}&type={type1,type2,typeN}&key={BingMapsKey}

Template Parameters

① Note

See the <u>Common Parameters and Types</u> section for additional common parameters to use with these URLs.

Common parameters include:

- Output Parameters: Includes response output types and the JSON callback parameters.
- <u>Culture Parameter</u>: Includes a list of the supported cultures.

When an alias is provided, you can use the alias to shorten the length of the query parameter. For example, severity=6.9 can be shortened to s=6.9.

Parameter values are not case-sensitive.

Expand table

Parameter	Alias	Description	Values

mapArea	Required. Specifies the area to search for traffic incident information.	A rectangular area specified as a bounding box. The height or width of the area bounding box should not exceed 500km. If either the width or height of the bounding box exceeds 500km the request may time out. Note that a maximum limit of 30 degrees for either width or height is enforced, requests with such bounding boxes will fail with HTTP status code 400. A bounding box defines an area by specifying SouthLatitude, WestLongitude, NorthLatitude, and EastLongitude values. For more information, see Location and Area Types. Example: 45.219,-122.325,47.610,-122.107
includeLocationCodes	Deprecated. This parameter is ignored. Specifies whether to include traffic location codes in the response. Traffic location codes provide traffic incident information for predefined road segments. A subscription is typically required to be able to interpret these codes for a geographical area or country/region.	One of the following values: - true - false [default] If you want to use the default value, you can omit this parameter from the URL request.
severity s	Optional. Specifies severity level of traffic incidents to return.	One or more of the following integer values: - 1: LowImpact - 2: Minor - 3: Moderate - 4: Serious

			The default is to return traffic incidents for all severity levels.
			Examples:
			severity=2,3,4
			s=2,3,4
type	t	Optional. Specifies the type	One or more of the following integer
		of traffic incidents to return.	values:
			- 1: Accident
			- 2: Congestion
			- 3: DisabledVehicle
			- 4: MassTransit
			- 5: Miscellaneous
			- 6: OtherNews
			- 7: PlannedEvent
			- 8: RoadHazard
			- 9: Construction
			- 10: Alert
			- 11: Weather
			Examples:
			type=2
			t=2,9
includeJamcidents		Optional. Specifices if the	One of the following values:
		response should include	- true
		abnormal traffic conditions that result in delays.	- false [default]

Response

A collection of TrafficIncident resources is returned when you make a request with the URL above. For more information about the TrafficIncident resource, see Traffic Incident Data. For more information about the common response syntax for the Bing Maps REST Services, see Common Response Description.

These URLs support JSON (application/json) and XML (application/xml) response formats. A JSON response is provided by default, unless you request XML output by setting the output (o) parameter. For more information, see Output Parameters.

JSON and XML responses are provided for the URL examples in the following section.

Examples

Get all traffic incidents in a specified area.

The following example shows how to request all traffic incident for an area defined as a bounding box (South Latitude, West Longitude, North Latitude, East Longitude). For more information about defining a bounding box, see Location and Area Types. Note that the includeLocationCodes parameter is not specified in this example.

```
http://dev.virtualearth.net/REST/v1/Traffic/Incidents/37,-105,45,-94?
key=YourBingMapsKey
```

JSON Response

This URL returns a response with the following format that includes a list of traffic incidents as traffic incident resources. For more information on the fields returned for a traffic incident resource, see Traffic Incident Data.

```
"__type": "TrafficIncident:http://schemas.microsoft.-
com/search/local/ws/rest/v1",
                    "point": {
                         "type": "Point",
                        "coordinates": [
                             39.682642,
                             -104.939053
                        1
                     },
                     "alertCCodes": [
                        4
                     ],
                     "delay": 0,
                    "description": "At CO 2/Colorado Boulevard (Denver) at
Mile Point 204. Two right lanes are closed due to a crash.",
                    "end": "/Date(1694535707744)/",
                    "eventList": [
                        203
                    ],
                    "icon": 2,
                    "incidentId": 18558549332008001,
                    "isEndTimeBackfilled": true,
                    "isJamcident": false,
                    "lastModified": "/Date(1694528507744)/",
                    "roadClosed": false,
                    "severity": 4,
                    "severityScore": 99,
                    "source": 5,
                    "start": "/Date(1694526697000)/",
                    "title": "I-25 N / US-87 N",
                    "toPoint": {
                         "type": "Point",
                        "coordinates": [
                             39.68307,
                             -104.940412
                         ]
                     },
                    "type": 1,
                    "verified": true
                },
                    " type": "TrafficIncident:http://schemas.microsoft.-
com/search/local/ws/rest/v1",
                     "point": {
                         "type": "Point",
                        "coordinates": [
                             39.04460549,
                             -94.38411355
                        1
                    },
```

```
"alertCCodes": [
                    ],
                    "delay": 0,
                    "description": "Accident on I-70 E from S Lees Summit
Rd/Exit 14 (I-70) to I-470/M0-291/Exit 15 (I-70).",
                    "end": "/Date(1694531388000)/",
                    "eventList": [
                        201
                    ],
                    "icon": 2,
                    "incidentId": 21366103288104000,
                    "isEndTimeBackfilled": false,
                    "isJamcident": false,
                    "lastModified": "/Date(1694528507744)/",
                    "roadClosed": false,
                    "severity": 4,
                    "severityScore": 99,
                    "source": 5,
                    "start": "/Date(1694525088000)/",
                    "title": "I-70 E",
                    "toPoint": {
                         "type": "Point",
                        "coordinates": [
                             39.04075549,
                             -94.35559355
                        ]
                    },
                    "type": 1,
                    "verified": true
                }
            ]
        }
    "statusCode": 200,
    "statusDescription": "OK",
    "traceId": "0e2cfdc28b554661b9539c1891244f28|DU00003090|0.0.0.0"
}
```

XML Response

If the output parameter is specified and set to xml (o=xml) in this URL, the URL returns a response with the following format.

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://schemas.microsoft.com/search/local/ws/rest/v1">
    <Copyright>Copyright © 2023 Microsoft and its suppliers. All rights re-
served. This API cannot be accessed and the content and any results may not
be used, reproduced or transmitted in any manner without express written
permission from Microsoft Corporation.</Copyright>
<BrandLogoUri>http://dev.virtualearth.net/Branding/logo_powered_by.png</Bra</pre>
ndLogoUri>
    <StatusCode>200</StatusCode>
    <StatusDescription>OK</StatusDescription>
    <AuthenticationResultCode>ValidCredentials/AuthenticationResultCode>
    <TraceId>de2ccfce537149d1a946feb025d8a65c|DU00003094|0.0.0.0/TraceId>
    <ResourceSets>
        <ResourceSet>
            <EstimatedTotal>1806/EstimatedTotal>
            <Resources>
                <TrafficIncident>
                    <Point>
                        <Latitude>39.682642</Latitude>
                        <Longitude>-104.939053</Longitude>
                    </Point>
                    <Source>5</Source>
                    <IncidentId>18558549332008001</IncidentId>
                    <LastModifiedUTC>2023-09-12T14:23:33.2106067Z/LastMod-
ifiedUTC>
                    <StartTimeUTC>2023-09-12T13:51:37Z</StartTimeUTC>
                    <EndTimeUTC>2023-09-12T16:23:33.2106067Z</EndTimeUTC>
                    <Type>Accident</Type>
                    <Icon>Accident</Icon>
                    <Severity>Serious</Severity>
                    <Verified>true</Verified>
                    <RoadClosed>false</RoadClosed>
                    <Description>At CO 2/Colorado Boulevard (Denver) at
Mile Point 204. Two right lanes are closed due to a crash.</Description>
                    <ToPoint>
                        <Latitude>39.68307</Latitude>
                        <Longitude>-104.940412</Longitude>
                    </ToPoint>
                    <Title>I-25 N / US-87 N</Title>
                    <IsEndTimeBackfilled>true</IsEndTimeBackfilled>
                    <IsExpired xsi:nil="true" />
                    <LevelOfDetail xsi:nil="true" />
                    <Delay>0</Delay>
                    <IsJamcident>false</IsJamcident>
                    <SeverityScore>99</SeverityScore>
                    <EventList>
                        <int>203</int>
                    </EventList>
                    <AlertCCodes>
```

```
<int>4</int>
                    </AlertCCodes>
                </TrafficIncident>
                <TrafficIncident>
                    <Point>
                        <Latitude>39.04373</Latitude>
                        <Longitude>-94.377238</Longitude>
                    </Point>
                    <Source>5</Source>
                    <IncidentId>21366103288104000</IncidentId>
                    <LastModifiedUTC>2023-09-12T14:23:33.2106067Z</LastMod-</pre>
ifiedUTC>
                    <StartTimeUTC>2023-09-12T13:24:48Z</StartTimeUTC>
                    <EndTimeUTC>2023-09-12T15:09:48Z</EndTimeUTC>
                    <Type>Accident</Type>
                    <Icon>Accident</Icon>
                    <Severity>Serious</Severity>
                    <Verified>true</Verified>
                    <RoadClosed>false</RoadClosed>
                    <Description>Accident on I-70 E from S Lees Summit
Rd/Exit 14 (I-70) to I-470/M0-291/Exit 15 (I-70).</br>
                    <ToPoint>
                        <Latitude>39.041002</Latitude>
                        <Longitude>-94.357209</Longitude>
                    </ToPoint>
                    <Title>I-70 E</Title>
                    <IsEndTimeBackfilled>false</IsEndTimeBackfilled>
                    <IsExpired xsi:nil="true" />
                    <LevelOfDetail xsi:nil="true" />
                    <Delay>0</Delay>
                    <IsJamcident>false</IsJamcident>
                    <SeverityScore>99</SeverityScore>
                    <EventList>
                        <int>201</int>
                    </EventList>
                    <AlertCCodes>
                        <int>4</int>
                    </AlertCCodes>
                </TrafficIncident>
            </Resources>
        </ResourceSet>
    </ResourceSets>
</Response>
```

HTTP Status Codes

① Note

For more details about these HTTP status codes, see **Status Codes and Error Handling**.

When the request is successful, the following HTTP status code is returned.

• 200

When the request is not successful, the response returns one of the following errors.

- 400
- 401
- 500
- 503

See Also

Using the REST Services with .NET JSON Data Contracts