Max Traffic Data API

February, 2014

Documentation for implementation of WSI's traffic data services using XML or JSON.

Contents

Introduction

Briefly describes the API and this document.

The Max Traffic Data API provides an opportunity to present incident and drive time information to end users in ways other than via Max Traffic in broadcast TV, Max Mobile Traffic on mobile or on Max Map Traffic on websites. Using this API can provide additional revenue opportunities for your station by enabling additional traffic-related web or mobile pages. It can also provide content to supplement a crawl system on-air.

This guide helps you display correct traffic data on your platforms so that it is consistent with traffic information displayed in your other WSI traffic platforms. It contains data field definitions and display rules for the traffic product.

Once you are provided the appropriate URLs for your platform(s) you will be enabled for incident information for your local DMA. Please note the usage requirements, including attribution restrictions, as stated within this document. You will also be enabled for drive times as defined within your Max Traffic software; however, there is currently a specific hardware requirement for the Max Prism workstation for this drive time function to be enabled. The Max Prism workstation must be an HP z400 or HP z420 with at least 12GB of memory.

If you need help understanding or implementing your data feed, contact your Account Manager.

Requirements and Recommendations

Requirements

- Max Traffic and the Max Traffic Data API each use the same designated market area (DMA) definition.
- Data obtained via the Max Traffic Data API is permitted for usage on web, mobile, and on-air displays per the terms of your license agreement with WSI.
- Traffic data is provided by INRIX. The following attribution is required, unless specifically excluded by your sales contract. Please contact your Account Manager for questions.

Platform	Attribution Requirements
Web	The link below will take you to the logo that must appear on each web page in which you implement traffic data from this API. The logo must be hyper-linked to http://www.inrix.com. Except for the size, the logo must not be altered in any manner including proportions, elements, colors, animations or otherwise distorted in perspective or two-dimensional appearance. The logo must maintain a minimum width of at least 72 pixels. The logo must not be obscured or cropped. INRIX logo for web use
Mobile	All mobile implementations must contain the following textual attribution in the 'About' or 'Help' section of the application: "Traffic and Driver Services Information Provided by INRIX © 2014. All rights reserved by INRIX, Inc."
Broadcast	**For ticker/crawl use:** The following logo must appear in the ticker/crawl, immediately adjacent to the traffic data available via this API. Please choose the appropriate logo based on the background color of the ticker/crawl. The logo must be legible and in proportion to the height of the ticker/crawl. Except for the size, the logo must not be altered in any manner including proportions, elements, colors, animations, or otherwise distorted in perspective or two-dimensional appearance. The logo must not be obscured or cropped. INRIX logo for on-air use (Blue font) INRIX logo for on-air use (White font) *<Note: Image is in the upper-left corner of browser>* If there are other intended uses of the traffic data beyond a ticker/crawl, please contact your Account Manager for clarification of attribution requirements for your specific use case.

Obtaining URLs Using the Intellicast Portal

Describes how to get the URLs specific to your implementation

You will need to log in to the Intellicast portal to access the URLs needed for all implementations of the Max Traffic Data API. If you do not have a content.intellicast.com login, please contact your Account Manager or email contentsupport@wsi.com. You may be required to provide a technical contact email so that you can be notified when there are service notifications or updates. You may also need to supply referrer domains for web use.

Please take note that the request URL for web use is <u>different</u> than that for native mobile app and broadcast use. The URL for web use is restricted to a referrer domain to prevent piracy. Please ensure you use the correct URL for your use case.

Steps

1. Log in to http://content.intellicast.com.
2. In the **Web Services** section, click the "Traffic" folder.
3. If you wish to implement the data services on a web property, choose Public/Web from the pull-down menu and then click the **Get Url** button. A pop-up window will appear with the URLs for both an XML and JSON implementation.
4. If you wish to implement the data services on a broadcast television or mobile property, choose OnAir/Mobile from the pull-down menu and then click the **Get Url** button. A pop-up window will appear with the URLs for both an XML and JSON implementation.

Example of XML Response

```
<traffic>
<incidents>
<incident incidentId="123956677" incidentType="1" severity="3" startTimeUtc="1/18/2013 12:00:00 AM"
endTimeUtc="9/22/2013 4:59:00 AM" shortDescription="I-20 E/B : Bridge maintenance work between Exit 210 CR-49
and Exit 205 AL-46 " fullDescription="Intermittent lane closures due to bridge maintenance work; drainage works;
maintenance work and resurfacing work on I-20 Eastbound between Exit 210 CR-49 and Exit 205 AL-46. Expect delays."
eventText="Bridge maintenance operations" roadName="I-20" direction="EB" marketId="116"
incidentText="Construction" severityText="High Impact"/>
</incidents>
<drivetimes>
<drivetime pathId="8cf75193-e1ed-4760-9766-02567c799e3b" pathName="Kennedy (I-90) OB
 Downtown to O'Hare" roadNames="I-90/I-94" roadDirection="Westbound" pathStartPoint="I-290 Eastbound - I-90/I-
94" pathEndPoint="I-190 Westbound - I-294/Exit 1" avgSpeedMph="56" avgSpeedKph="90" driveTimeMinutes="17"
pathLengthMiles="15.3" pathLengthKm="24.6"/>
</drivetimes>
</traffic>
```

Example of JSON Response

```
{"incidents":[{"incidentId":"123956677","incidentType":"1","incidentText":"Construction",
"severity":"3","severityText":"High Impact","startTimeUtc":"1/18/2013 12:00:00
AM","endTimeUtc":"9/22/2013 4:59:00 AM","shortDescription":"I-20 E/B : Bridge maintenance
work between Exit 210 CR-49 and Exit 205 AL-46 ","fullDescription":"Intermittent lane
closures due to bridge maintenance work; drainage works; maintenance work and resurfacing
work on I-20 Eastbound between Exit 210 CR-49 and Exit 205 AL-46. Expect
delays.","eventText":"Bridge maintenance operations","roadName":"I-
20","direction":"EB","marketId":"116"},"drivetimes":[{"pathId":"8cf75193-e1ed-4760-9766-
02567c799e3b","pathName":"Kennedy (I-90) OB  Downtown to O'Hare","roadNames":"I-90/I-
94","roadDirection":"Westbound","pathStartPoint":"I-290 Eastbound - I-90/I-
94","pathEndPoint":"I-190 Westbound - I-294/Exit
1","avgSpeedMph":"55","avgSpeedKph":"89","driveTimeMinutes":"17","pathLengthMiles":"15.3"
,"pathLengthKm":"24.6"}]}
```

Field Descriptions

Below are details about each of the data fields available in the API.

The format of the field definitions described in this document is as follows:

Fieldname, *sample*

The sample data in the field descriptions below references the XML Response Sample on page 5.

Rule Definitions

Each data field has two rules associated with it, as defined below.

This rule…	…does this….	…and answers this…
Usage Rule	Determines whether a data field is required or optional; and if optional, whether it can be substituted with another field.	Must I use this data field or can I replace it with another one?
Display Rule	Defines the proper display format for a data field.	How do I display this data field?

If you need help understanding or implementing your data feed, contact your Account Manager.

Incidents

incidentId, *123956677*					
A unique numeric identifier for each incident. Updates to pre-existing incidents will maintain the same incidentId through its lifespan. Once an incident has expired, that incidentId will not be re-used or re-assigned.					
Usage Rule:	Required				
Display Rule:	Generally not displayed.				
Type:	GUID	**Case:**		**Length:**	10	**Can Be Null:**	N

incidentType, *1*				
A numeric ID representing the category of the incident. Valid values are 1-4. See **Incident Type** table in Appendix A for all valid values.				
Usage Rule:	Optional			
Display Rule:	If presenting to the end user, always display in conjunction with the incidentText field.			
Type:	Integer	**Case:**	**Length:** 1	**Can Be Null:** N

severity, *3*				
A numeric ID representing the severity of the incident. Valid values are 0-4. See **Severity** table in Appendix A for all valid values.				
Usage Rule:	Optional			
Display Rule:	If displaying to end user, always display in conjunction with the severityText field.			
Type:	Integer	**Case:**	**Length:** 1	**Can Be Null:** N

startTimeUtc, *1/18/2013 12:00:00 AM*				
The start date and time of the incident, in UTC.				
Usage Rule:	Optional			
Display Rule:	If used, convert to local time.			
Type:	DateTime	**Case:**	**Length:** 22	**Can Be Null:** N

endTimeUtc, *9/22/2013 4:59:00 AM*						
This field is the expected time and date that the incident will be cleared, in UTC.						
Usage Rule:		Optional				
Display Rule:		If used, convert to local time.				
Type:	DateTime	**Case:**		**Length:**	22	**Can Be Null:**	N

shortDescription, *I-20 E/B : Bridge maintenance work between Exit 210 CR-49 and Exit 205 AL-46*						
A shortened text description of the incident report.						
Usage Rule:		Optional				
Display Rule:		If used, use in its entirety. Do not shorten, abbreviate or otherwise modify in any way. It is recommended to use either the shortDescription or fullDescription fields, but not both.				
Type:	NVarchar	**Case:**	Proper	**Length:**	255	**Can Be Null:**	N

fullDescription, *Intermittent lane closures due to bridge maintenance work; drainage works; maintenance work and resurfacing work on I-20 Eastbound between Exit 210 CR-49 and Exit 205 AL-46. Expect delays.*						
A more complete description of the incident report.						
Usage Rule:		Optional				
Display Rule:		If used, use in its entirety. Do not shorten, abbreviate or otherwise modify in any way. It is recommended to use either the shortDescription or fullDescription fields, but not both. This field is listed as Mixed case because there can be times where capitalization is unexpected; i.e. a street name is in all caps but the rest of the description uses proper capitalization. This is due to the way the data is entered at its source.				
Type:	NVarchar	**Case:**	Mixed	**Length:**	510	**Can Be Null:**	N

eventText, *Bridge maintenance operations*					
This field is a "headline" description of the incident. It is created from the RDS (Radio Data System) standard set of codes. This field is more descriptive than the incidentText field.					
Usage Rule:	Optional				
Display Rule:					
Type:	NVarchar	**Case:**	Proper	**Length:**	255	**Can Be Null:**	N

roadName, *I-20*					
This field is the name of the (primary) road where the incident occurred. When the incident is an event (i.e. concert, baseball game, etc.) this field will be the name of the venue where the event is taking place.					
Usage Rule:	Optional				
Display Rule:	Often used in conjunction with the direction field. This field is listed as Mixed case because there can be times where capitalization is unexpected; i.e. a street name is in all caps but the rest of the description uses proper capitalization. This is due to the way the data is entered at its source.				
Type:	NVarchar	**Case:**	Mixed	**Length:**	100	**Can Be Null:**	N

direction, *EB*					
The direction of travel on the primary road where the incident occurred.					
Usage Rule:	Optional				
Display Rule:	Often used in conjunction with the roadName field. When the incident is an event (i.e. concert, baseball game, etc.) this field will be null.				
Type:	NVarchar	**Case:**	Upper	**Length:**	20	**Can Be Null:**	Y

marketId, *116*							
A unique market identifier representing the Designated Market Area, or DMA.							
Usage Rule:		Generally not used.					
Display Rule:		Do not display.					
Type:	Integer	**Case:**		**Length:**	10	**Can Be Null:**	N

incidentText, *Construction*							
A text description of the incidentType field. See **Appendix A** for a complete list of possible text phrases.							
Usage Rule:		Optional					
Display Rule:		This field is typically displayed instead of the incidentType field. If used, do not modify the phrases in any way.					
Type:	Varchar	**Case:**	Proper	**Length:**	12	**Can Be Null:**	N

severityText, *High Impact*							
A text description of the severity field.							
Usage Rule:		Optional					
Display Rule:		Typically displayed instead of the severity field. If used, do not modify the definitions in any way.					
Type:	Varchar	**Case:**	Proper	**Length:**	15	**Can Be Null:**	N

Drive Times

pathId, *8cf75193-e1ed-4760-9766-02567c799e3b*						
A unique identifier for the drive time path. This pathId will not change (for a given drive time path) unless a Max Traffic user deletes the drive time path from Max Traffic and then subsequently re-creates it.						
Usage Rule:	Optional					
Display Rule:	Do not display.					
Type:	GUID	**Case:**		**Length:**	36	**Can Be Null:**	N

pathName, *Kennedy (I-90) OB Downtown to O'Hare*						
The display name the Max Traffic user has given to represent the complete drive time path. This may be an automatically generated name or manually entered by the Max Traffic user.						
Usage Rule:	Optional					
Display Rule:	If used, use in its entirety. Do not shorten, abbreviate or otherwise modify in any way.					
Type:	Varchar	**Case:**	Mixed	**Length:**	1024	**Can Be Null:**	Y

roadNames, *I-90/I-94*						
The road name on which the drive time path was drawn. If the drive path traverses multiple roads they will be separated by a pipe character.						
Usage Rule:	Optional					
Display Rule:	If displayed, often displayed with the roadDirection field.					
Type:	Varchar	**Case:**	Mixed	**Length:**	1024	**Can Be Null:**	Y

roadDirection, *Westbound*					
The direction in which the drive time path was drawn, on the road indicated in the roadNames field. If there are multiple roads in the roadNames field, there will be a corresponding direction for each of those roads in this roadDirection field, pipe delimited.					
Usage Rule:		Optional			
Display Rule:		If displayed, often displayed with the roadNames field.			
Type:	Varchar	**Case:**	Proper	**Length:**	1024	**Can Be Null:**	Y

pathStartPoint, *I-290 Eastbound – I-90/I-94*					
The name of the initiating point of the drive time path as defined in Max Traffic. This name can either be automatically generated in Max Traffic or manually edited by the Max Traffic user.					
Usage Rule:		Optional			
Display Rule:		If used, use in its entirety. Do not shorten, abbreviate or otherwise modify in any way.			
Type:	Varchar	**Case:**	Mixed	**Length:**	1024	**Can Be Null:**	Y

pathEndPoint, *I-190 Westbound – I-294/Exit 1*					
The name of the terminating point of the drive time path as defined in Max Traffic. This name can either be automatically generated in Max Traffic or manually edited by the Max Traffic user.					
Usage Rule:		Optional			
Display Rule:		If used, use in its entirety. Do not shorten, abbreviate or otherwise modify in any way.			
Type:	Varchar	**Case:**	Mixed	**Length:**	1024	**Can Be Null:**	Y

avgSpeedMph, *56*					
The average speed, in miles per hour, that traffic is driving between pathStartPoint and pathEndPoint. If the current flow data is manually overridden by a Max Traffic user, that adjustment will be compensated for in this calculation. This value will be rounded to the nearest mile per hour.					
Usage Rule:		Optional			
Display Rule:		If displayed, it is advisable to display the appropriate units along with this field.			
Type:	Integer	**Case:**	**Length:**	10	**Can Be Null:**	Y

avgSpeedKph, *90*					
The average speed, in kilometers per hour, that traffic is driving between pathStartPoint and pathEndPoint. If the current flow data is manually overridden by a Max Traffic user, that adjustment will be compensated for in this calculation. This value will be rounded to the nearest kilometer per hour.					
Usage Rule:		Optional			
Display Rule:		If displayed, it is advisable to display the appropriate units along with this field.			
Type:	Integer	**Case:**	**Length:**	10	**Can Be Null:**	Y

driveTimeMinutes, *17*					
The most recent drive time calculated for this drive path, rounded to the nearest minute. If the current flow data is manually overridden by a Max Traffic user, that adjustment will be compensated for in this calculation.					
Usage Rule:		Optional			
Display Rule:		If displayed, it is advisable to display the appropriate units along with this field.			
Type:	Integer	**Case:**	**Length:**	10	**Can Be Null:**	Y

pathLengthMiles, *15.3*						
The length, in miles, of the complete drive path (from pathStartPoint to pathEndPoint) as defined in Max Traffic. The value is rounded to the nearest tenth of a mile.						
Usage Rule:		Optional				
Display Rule:		If displayed, it is advisable to display the appropriate units along with this field.				
Type:	Float	**Case:**		**Length:**	17	**Can Be Null:** Y

pathLengthKm, *24.6*						
The length, in kilometers, of the complete drive path (from pathStartPoint to pathEndPoint) as defined in Max Traffic. The value is rounded to the nearest tenth of a kilometer.						
Usage Rule:		Optional				
Display Rule:		If displayed, it is advisable to display the appropriate units along with this field.				
Type:	Float	**Case:**		**Length:**	17	**Can Be Null:** Y

Appendix A

Incident Type

Incident Type Value	Incident Type Description (i.e. incidentText field)
1	Construction
2	Event
3	Flow
4	Incident

Severity

Severity Value	Severity Description
0	Minor Impact
1	Low Impact
2	Moderate Impact
3	High Impact
4	Severe Impact