

MapItFast REST API

Table of Contents

- Logging in and Permissions
- The URL Structure
- Communications with the REST API
 - Getting multiple objects
 - Getting a single object
 - Inserting an object
 - Updating an object
 - Deleting an object
- Object Structures
 - Project
 - ProjectFolder
 - Point
 - Picture
 - GeoLine
 - GeoLinePoint
 - GeoPolygon
 - GeoPolygonPoint
 - Icon
 - FormObject

Logging in and Permissions

- The REST API uses BASIC authentication.
- Only administrators can access the REST API.

Communications are in JSON for sending and receiving data from the REST API.

C# Example for authentication

```
HttpRequest httpWebRequest = (HttpRequest)WebRequest.Create(address);
httpWebRequest.Headers.Add("Authorization", "Basic " +
Convert.ToBase64String(System.Text.ASCIIEncoding.ASCII.GetBytes(string.Format("{0}:{1}",
UserName, Password))));
```

The URL

The URL Structure for the REST API:

<https://mapitfast.agterra.com/api/ObjectName>

Where ObjectName is one of the following:

- Projects
- ProjectFolders
- Points
- Pictures
- GeoLines
- GeoPolygons
- Icons

Communications with the REST API

Getting multiple objects from the server

The main URL for the ObjectName with a GET request will get all items on the server.

Example: [GET] <https://mapitfast.agterra.com/api/Points>

Will return a full list of all points on the server in JSON.

Points, Lines, Polygons and Pictures also allow another GET parameter: projectId.

Example: <https://mapitfast.agterra.com/api/Points/?projectId=2>

This will return a list of all points with a specific project specified by the parameter projectId

Lines and Polygons have another GET parameter: includePoints. By default, it is set to false and will not get the points for all of the polygons. To include the points, set includePoints to true.

Example: <https://mapitfast.agterra.com/api/Points/?projectId=2&includePoints=true>

Getting a single object from the server

To get a single object from the server, you can just add the ID to the end of the URL.

Example: [GET] <https://mapitfast.agterra.com/api/Points/7>

Will return a single point.

Inserting an object into the database

When inserting an object, you will POST the object in JSON format to the server. Just use the default URL: [POST] <https://mapitfast.agterra.com/api/Points>

When doing a POST without an ID, it will attempt to insert the object into the database.

Updating objects in the database

When updating you PUT the object in JSON format to the server. The URL will need the ID of the object you wish to update.

Example: [PUT] <https://mapitfast.agterra.com/api/Points/7>

Deleting objects in the database

To do a deletion, you must specify DELETE as the action type, as well as the ID of the object you want to delete.

Example [DELETE] <https://mapitfast.agterra.com/api/Points/7>

Object Structures

Project

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>ProjectId</i>	Integer	Not updatable
<i>Title</i>	String	Max 255 characters
<i>Description</i>	String	
<i>LastChildUpdate</i>	DateTime	Last time an object in the project was updated
<i>Creator</i>	Guid	Not Updatable
<i>ProjectFolderId</i>	Integer – NULLABLE	
<i>CreatorName</i>	String	Not Updatable Resolved first name and last name OR username if name isn't available

ProjectFolder

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>ProjectFolderId</i>	Integer	Not Updatable
<i>ParentFolderId</i>	Integer – NULLABLE	Put as null to not be inside a folder
<i>FolderName</i>	String	Name of the folder. Max 255 characters

Point

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>PointId</i>	Integer	Not Updatable
<i>ProjectId</i>	Integer	The ID of the project this point belongs to
<i>IconId</i>	Integer	ID of the icon to display as this point. Use ID of 3 for the default point icon
<i>Title</i>	String	Limit 63 characters
<i>Description</i>	String	Limit 511 characters
<i>ItemTime</i>	DateTime	When the point was mapped
<i>Longitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Latitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Elevation</i>	Decimal	In meters
<i>Creator</i>	Guid	Not updatable
<i>CreatorResolved</i>	String	Not Updatable Resolved first name and last name OR username if name isn't available
<i>Forms</i>	FormObject Array	List of Strider forms associated with this object.

Picture

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>PictureId</i>	Integer	Not Updatable
<i>ProjectId</i>	Integer	
<i>FileSize</i>	Integer – NULLABLE	Not updatable
<i>ItemDateTime</i>	DateTime	Date and time this picture was located.
<i>Longitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Latitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Elevation</i>	Decimal	In Meters
<i>Title</i>	String	Limit 63 characters
<i>Description</i>	String	Limit 511 characters
<i>Creator</i>	Guid	Not updatable
<i>CreatorResolved</i>	String	Not Updatable Resolved first name and last name OR username if name isn't available
<i>PictureDate</i>	Byte Array	The byte data of the picture. Will fail if the byte data doesn't resolve to a picture.
<i>Forms</i>	FormObject Array	List of Strider forms associated with this object.

GeoLine

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>GeoLineId</i>	Integer	Not Updatable
<i>ProjectId</i>	Integer	
<i>Title</i>	String	Max 63 characters
<i>Description</i>	String	Max 511 characters
<i>StartTime</i>	DateTime – NULLABLE	The time when the line was started.
<i>EndTime</i>	DateTime – NULLABLE	The time when the line was stopped.
<i>Color</i>	String	Max 9 characters. Accepted format: #AARRGGBB
<i>Width</i>	Decimal	Default: 5
<i>Style</i>	String	Accepted: Dashed or Solid
<i>Creator</i>	Guid	Not Updatable
<i>CreatorResolved</i>	String	Not Updatable Resolved first name and last name OR username if name isn't available
<i>GeoLinePoints</i>	GeoLinePoint Array - NULLABLE	Array of GeoLinePoint objects. Leave null to not update the points when updating. New lines with less than 2 points will be rejected.
<i>Forms</i>	FormObject Array	List of Strider forms associated with this object.

GeoLinePoint

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>OrdinalNumber</i>	Integer	This number sets the order in which the points are drawn in the line. Duplicate numbers are not allowed in a single line.
<i>GeoLineId</i>	Integer	The line this point is associated with.
<i>Latitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Longitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Elevation</i>	Decimal	In Meters

GeoPolygon

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>GeoPolygonId</i>	Integer	Not Updatable
<i>ProjectId</i>	Integer	
<i>Title</i>	String	Max 63 characters
<i>Description</i>	String	Max 511 characters
<i>StartTime</i>	DateTime – NULLABLE	The time when the polygon was started.
<i>EndTime</i>	DateTime – NULLABLE	The time when the polygon was stopped.
<i>Color</i>	String	Outline Color – CURRENTLY UNUSED! Max 9 characters. Accepted format: #AARRGGBB
<i>FillColor</i>	String	Fill Color. Max 9 characters. Accepted format: #AARRGGBB
<i>Width</i>	Decimal	Outline line width. Default: 5 CURRENTLY UNUSED!
<i>Style</i>	String	The Fill Style – CURRENTLY UNUSED!
<i>Creator</i>	Guid	Not Updatable
<i>CreatorResolved</i>	String	Not Updatable Resolved first name and last name OR username if name isn't available
<i>GeoPolygonPoints</i>	GeoPolygonPoint Array - NULLABLE	Array of GeoPolygonPoint objects. Leave null to not update the points when updating. New polygons with less than 3 points will be rejected.
<i>Forms</i>	FormObject Array	List of Strider forms associated with this object.

GeoPolygonPoint

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>OrdinalNumber</i>	Integer	This number sets the order in which the points are drawn in the polygon. Duplicate numbers are not allowed in a single polygon.
<i>GeoPolygonId</i>	Integer	The polygon this point is associated with.
<i>Latitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Longitude</i>	Decimal	MUST BE IN DECIMAL DEGREES
<i>Elevation</i>	Decimal	In Meters

Icon

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>IconId</i>	Integer	Not Updatable
<i>Name</i>	String	Max 50 characters
<i>Bytes</i>	Byte Array	The byte data of the picture. Will fail if the byte data doesn't resolve to an image.

FormObject (Not updatable)

<i>Name</i>	<i>Data Type</i>	<i>Extra Info</i>
<i>FormInfolId</i>	Integer	Not Updatable. ID of the Strider form.
<i>FormRowId</i>	Integer	Not Updatable. ID of the Strider form's record.
<i>MapObjectId</i>	Integer	Not Updatable. ID of the map object it is associated with.
<i>FormName</i>	String	Not Updatable. Name of the form.
<i>SyncVersion</i>	String	Not Updatable. Last version associated by the server.
<i>LastUser</i>	Guid	Not Updatable. When the form was last created.
<i>LastUpdate</i>	DateTime	Not Updatable. When the form was last updated.
<i>Creator</i>	Guid	Not Updatable. The person that created the form.
<i>CreatedOn</i>	DateTime	Not Updatable. When form was created.
<i>Operation</i>	String	Not Updatable. Last operation that someone has done with the form (I = inserted, U = Updated, D = Deleted)

Notes:

- Description sizes will change to a larger data type in the future. You can also use line breaks in this field.
- Other fields may show in JSON. These fields are unused and not updatable at this point.
- Update all forms from Strider. This will automatically update the FormObject for you.

We reserve the right to make changes to this system at any time.