AgTerra TECHNOLOGIES, INC.

Training Session

Using the REST API with Strider Forms and Reports

Before we get started….

- ✓ Please mute your phone!
- ✓ If you have a question, feel free to use the chat window on the Go To Meeting Toolbar

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STRIDER
Mobile Form and Reporting System

REST API opens a host of advanced integration options to our customers

1. Integrates form data with your back-end systems
   - Function with most programming languages
2. Organizes very complex application data the way you want
3. Gives you a simple framework to work with
   - Use standard HTTP request methods with or without SSL and JSON data format
   - It's much more simple than SOAP
4. Securely automates data communication between your back office system and Strider
   - Operating system and programming language agnostic
   - High performance stateless network interface
   - Compatible with firewalls, proxies, etc.
5. Allows you to put data into Strider from your back-end systems

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Mobile Form and Reporting System

Strider Rest API

Overview

- Representational State Transfer (REST)
- Communications will be in JSON (JavaScript Object Notation) (media type “application/json”)
- Communications can be secured with SSL
- “Basic access Authentication” used, so use of SSL is highly recommended.
- Examples in the demo will be in C# using a console application

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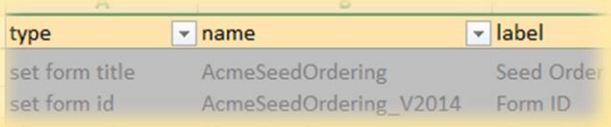
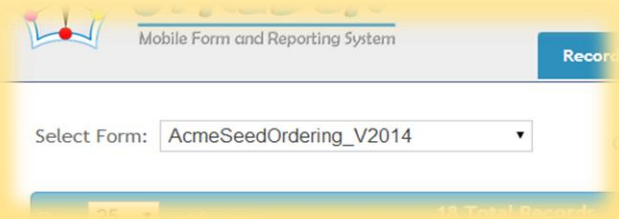
The URL Structure

https://forms.agterra.com/api/{FormId}/{Action}/{ID}

The Form Id



type	name	label
set form title	AcmeSeedOrdering	Seed Orde
set form id	AcmeSeedOrdering_V2014	Form ID



Actions

1. Get – Get Single Entry (GET, Id Required)
    a. Single by ID
2. Filtered – Get multiple entries based on queries. (POST)
    a. Query Objects expected (by post)
        i. IsAnd – BOOL (true false)
        ii. FilterName – STRING
        iii. Operator – STRING (=, >, <, <=, >=, !=, <>, !<, !>)
        iv. Value – STRING (“Null” Translated into DB NULL)
3. Put – Update Entry(POST, Id Required)
    a. Bypasses business logic (Constraints, calculates, etc)
4. Post – Create entry(POST)
    a. Bypasses business logic (Constraints, calculates, etc)
5. Delete – Delete Entry(GET, Id Required)

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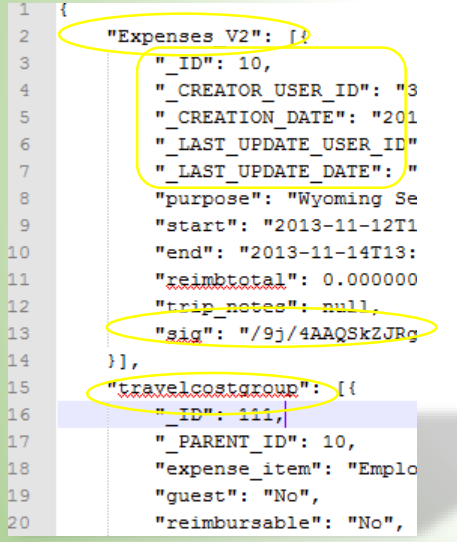
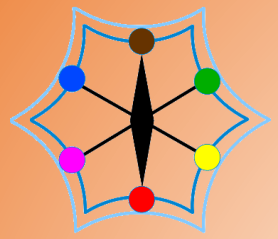
Strider Rest API – Expected JSON



```
{
    "Expenses V2": [{
        "_ID": 10,
        "_CREATOR_USER_ID": "3
        "_CREATION_DATE": "201
        "_LAST_UPDATE_USER_ID"
        "_LAST_UPDATE_DATE": "
        "purpose": "Wyoming Se
        "start": "2013-11-12T1
        "end": "2013-11-14T13:
        "reimbtotal": 0.000000
        "trip_notes": null,
        "sig": "/9j/4AAQSkZJRg
    }],
    "travelcostgroup": [{
        "_ID": 111,
        "_PARENT_ID": 10,
        "expense_item": "Emplo
        "guest": "No",
        "reimbursable": "No",
```

Tip: When starting, its always good to write the JSON to a file for easy review and to see what should be expected.

- Main Table (Main Form)
- Sub-Tables (Repeat Data)
- Images are Base64 encoded data
- Metadata columns are not updatable
- Field names are the same as in the XLS spreadsheet
- GeoPoint fields are appended with _LAT, _LNG, _ALT, _ACC



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Expected changes

- ID will become optional on Post and Filtered queries
- User GUIDs will be translated into usernames.

Visual Studio Express can be downloaded for free
C# project posted on the AgTerra website.
www.AgTerra.com
Look for the “strider updates” blog post (Use the search)

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