

# FileMaker and Web Services: The continuing story

WEB005

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**business**  
**without** boundaries  
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# Who am I?

## Originally from

- Which is not
- I now live

## FileMaker developer since long before I had grey hair

- 'Boutique' development company
- Web application development
- Technology integration



# Steve Winter CSSTWP

**Certified Stealing S\*\*t That Works Practitioner**

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<http://csstwp.com/>

# Standing on the shoulders of giants

Credit for techniques shown here goes to

- Dan Smith (ht Douglas Crockford and Todd Geist)
- Don Collier
- Jesse Antunes (and the Six Fried Rice team)
- Daniel A. Shockley
- Michael Horak
- Anders Monsen
- Donovan Chandler
- Jesse Barnum (and the 360 Works team)
- Nicholas Orr (and the Goya team)

# Session overview

Web services - why do we care?

Why we love InsertFromURL

Retrieving remote data

Handling returned JSON

Processing XML for import

Exposing FileMaker data

# Web services - why do we care?

FileMaker is awesome

Interacting with others

Making life simpler

Filling gaps

# What can you do with web services?

Everything...!

ProgrammableWeb (<http://bit.ly/fm-ws-pwapi>)

11,500 APIs

# How do we get to this goodness?

## Insert From URL

- Enters the content from a URL into a field
  - http(s) = GET
  - http(s)post = POST
  - ftp(s)
  - file



# Retrieving remote data

Demo

# Retrieving remote data

A lot of modern APIs return JSON

Many return XML

Some are configurable (i.e. you can select the returned format)

Other formats exist

# Retrieving remote data

Many APIs are secured

POST to send credentials

# Awesome real-world example

Anders Monsen's library management

<http://bit.ly/fm-ws-books>

# Handling returned JSON

No native JSON parsing in FileMaker (sadly)

Text parsing custom functions

Plugin

Modular JSON: <http://bit.ly/fm-ws-json>

# Handling returned JSON

Demo

# Handling returned XML

## Some native handling of XML

- Native import with XSL applied

## Text parsing custom functions

## Plugins

# Handling returned XML

Demo



# Exposing FileMaker data

Why would we do this?

How would we do this?

- write your own custom code solution
- get me to write you custom code ;-)
- use the expertise of the FileMaker community

# Write your own code

## Pros

- you're in complete control
- have in-house expertise to do it, so why not
- 'cheap'...?

## Cons

- time consuming (really)
- your time (or mine) is expensive

# Write your own code

## When

- you do have in-house expertise
- your needs are either very simple **or** very complex
- this is an addition to a functioning system

# Use existing expertise

## Pros

- all (most) of the hard work is done for you
- support and assistance is available
- know you're producing 'high quality' web services

## Cons

- tied in to someone else's system
- 'expensive'

# RESTfm URLs

`/RESTfm/{database}/layout/{layout}/{recordID}.{format}`

`/RESTfm/{database}/script/{script}/{layout}.{format}`

# RESTfm Methods

GET - 'gets' the requested resource

PUT - 'updates' the requested resource (if relevant)

POST - 'creates' a new resource

DELETE - 'deletes' the current resource

# RESTfm

## Demo

# Questions...?

Please come to the mic to ask questions



# Session Updates

This session DOES have updates.

[www.filemaker.com/devcon/speaker\\_updates](http://www.filemaker.com/devcon/speaker_updates)

(This is also listed in your conference guide)

# Bonus resources

‘Starter Solution’ for custom-coding an FM-based web service

# Thank You!

Please remember to fill out the session evaluation at:  
[www.filemaker.com/devcon/evaluations](http://www.filemaker.com/devcon/evaluations)

