

**A Web
Friendly
API?**

Javascript

AJAX

Python Ruby

PHP Perl

Curl



**One Thing in
common ...**

They

HATE

SOAP!

But

LOVE

The Web

URIs
identify
things

**and they can be
anywhere ..**



use

cool | URIs

read

RFC 2616

Constrain Verbs

- GET / HEAD
- POST
- PUT
- DELETE
- OPTIONS

YAGNI?



ask
IS IT SAFE?



understand HTTP methods

method	safe	idempotent	semantics	resource	cacheable
GET	X	X	X	X	X
HEAD	X	X	X	X	X
PUT		X	X	X	
POST					*
DELETE		X	X	X	
OPTIONS	X	X	X		
PROPFIND	X	X	X	X	*
PROPPATCH		X	X	X	
MKCOL		*	X	X	
COPY		X	X	X	
MOVE		?	X	X	
LOCK			X	X	
UNLOCK		X	X	X	
PATCH		*	X	X	

think about representations

- HTML
- RSS/Atom
- XML
- JSON
- *whatever*

Warning!

You are about to see
Naked
Protocol Headers

Content-Negotiation

HTTP GET:

```
Accept: application/weatherml+xml; q=1.0,  
        application/xml; q=0.8,  
        text/html; q=0.5
```

Apache Server .htaccess:

```
AddType application/weatherml+xml wea  
Options +MultiViews
```

```
./index.wea  
./index.xml  
./index.html
```

enjoy the free caching

```
HTTP GET http://flickr.com/photos/psd/2450160  
If-Modified-Since: Fri, 31 Dec 1999 23:59:59 GMT  
If-None-Match: 'guid-21343244324'
```



```
HTTP/1.1 412 Precondition Failed
```

make Phone Call

```
HTTP POST http://example.com/calls
Content-Type: application/x-www-form-urlencoded
Accept: text/xml; charset=utf-8
```

```
callingParty=tel:+447918808
calledParty=sip:Merlin
```



```
HTTP 1.1 201 Created
Location: http://example.com/calls/123213
Content-Type: text/xml; charset=utf-8

<callInfo>
  <callId>http://example.com/calls/123213</callId>
  <callStatus>Initial</callStatus>
</callInfo>
```

get Call Info

```
HTTP GET http://example.com/calls/123213
Accept: text/xml
```



```
200 OK
Content-Type: text/xml; charset=utf-8

<callInfo>
  <callId> http://example.com/user/fred/calls/123213
  <callStatus> CallInitial </callStatus>
  <callingParty> tel:+447918880...
  <calledParty> tel:+447918880...
  <timeStarted> 2007-01-09 11:45:20
  <duration> 502
  <terminationStatus> CallNotTerminated
</callInfo>
```

end Call

```
HTTP POST http://example.com/calls/123213  
Content-Type: application/x-www-form-urlencoded  
  
callStatus=Terminated
```



```
202 Accepted  
Location: http://example.com/calls/123213
```

list Recent Calls

```
HTTP GET http://example.com/calls/feed
```



```
200 OK  
Content-Type: application/atom+xml
```



```
<feed xmlns="http://www.w3.org/2005/Atom">  
  <title>Phonebox Calls</title>  
  <link rel="self" href="http://example.com/calls/"  
        rel="alternate" type="text/html"/>  
  <updated>2007-01-09T11:45:02Z</updated>  
  <author><name>Phonebox</name></author>  
  <id>tag:example.com,2007-01-09:/calls</id>  
  <entry>  
    <link href="http://example.com/user/psd/calls/1234567/" />  
    <title>Call 1234567</title>  
    <id>tag:example.com/calls/1234567-200701091223313</id>  
    <summary>CallInformation</summary>  
    <updated>2005-10-13T18:30:02Z</updated>  
  </entry>  
  <entry>  
    <link href="http://example.com/user/fred/calls/17231667/" />  
    ...
```

Overall

<http://example.com/calls>

<http://example.com/calls/feed>

<http://example.com/user/paul/calls/feed>

<http://example.com/user/paul/calls/7d6374da5>

<http://example.com/user/paul/calls/search?callingParty=tel:%3A44791888>

<http://example.com/sms>

<http://example.com/sms/feed>

<http://example.com/user/fred/sms/7d6374da5>

<http://example.com/user/fred/sms/inbox/feed>

<http://example.com/user/fred/sms/inbox/7d6374da5>

<http://example.com/user/fred/sms/inbox?search?from=tel:%3A44791888>

....

**Yes, Dear Reader,
there's no API as such**

**it's just yet another
Web site ..**

Surf long and prosper ..