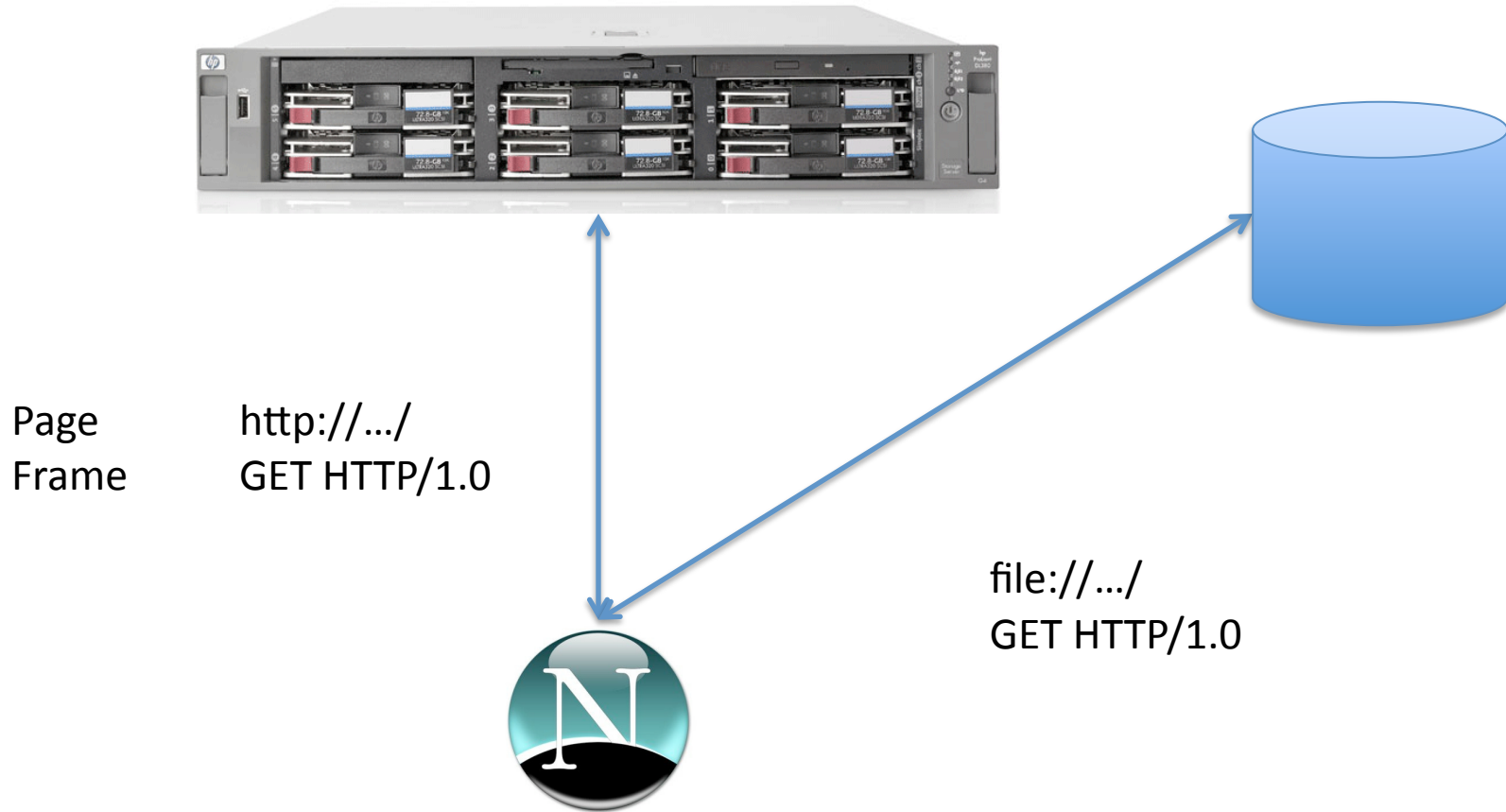


Server-Free Web Apps

Or... how to lose weight quickly

A Long, Long Time Ago...



It was the best of times...

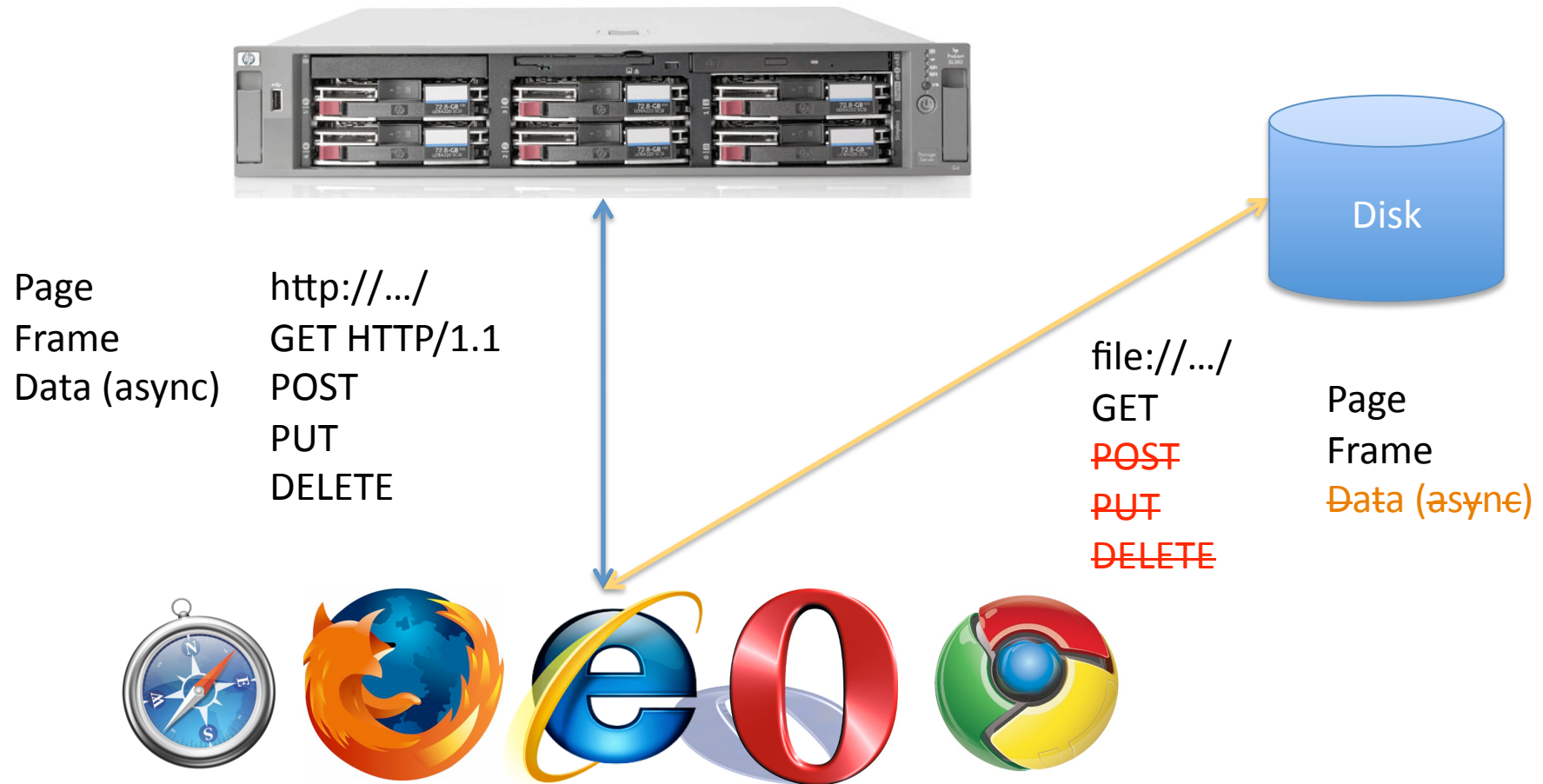


Page
Frame
Data (async)

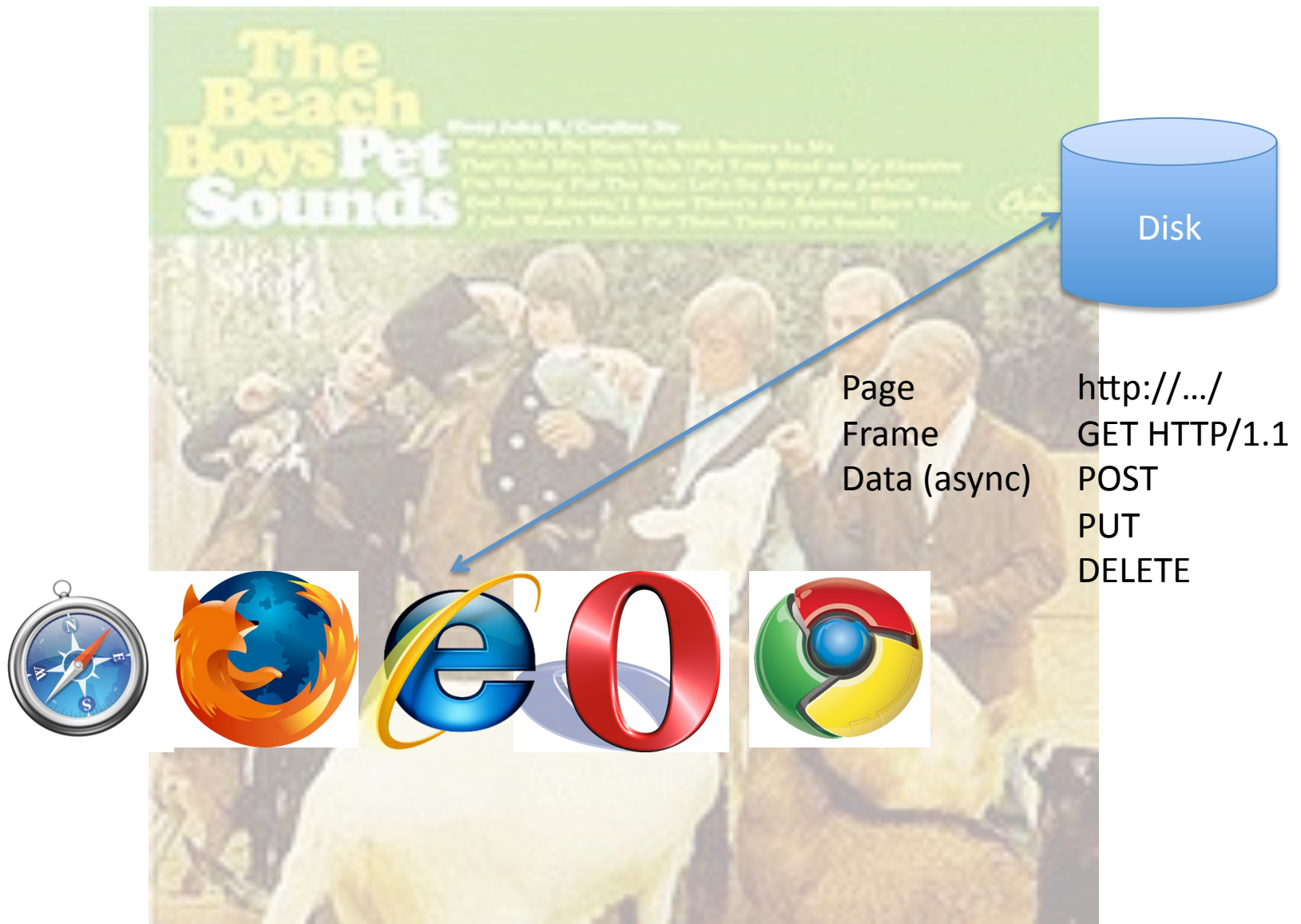
http://.../
GET HTTP/1.1
POST
PUT
DELETE



...it was the worst of times.



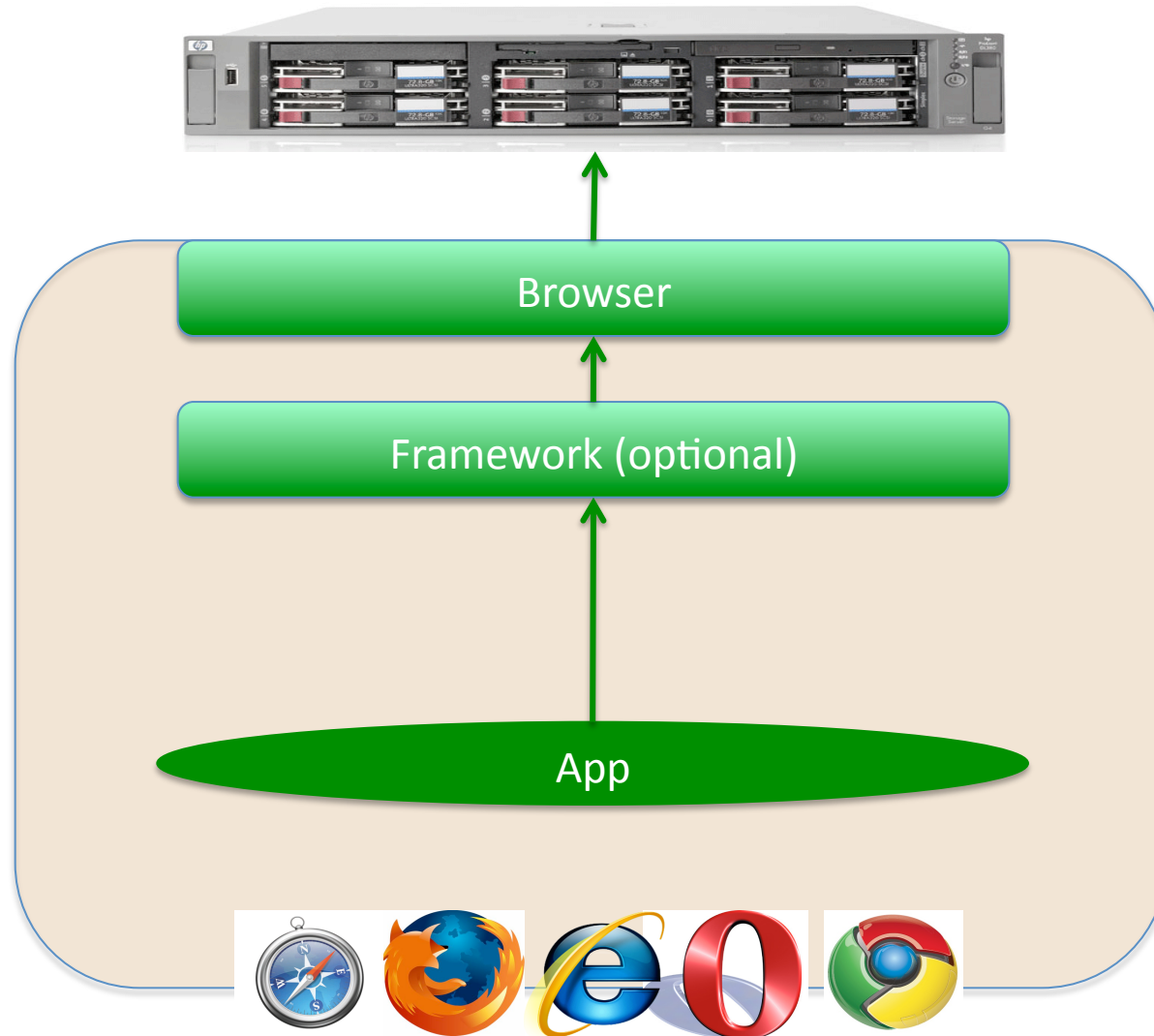
Wouldn't it be nice...



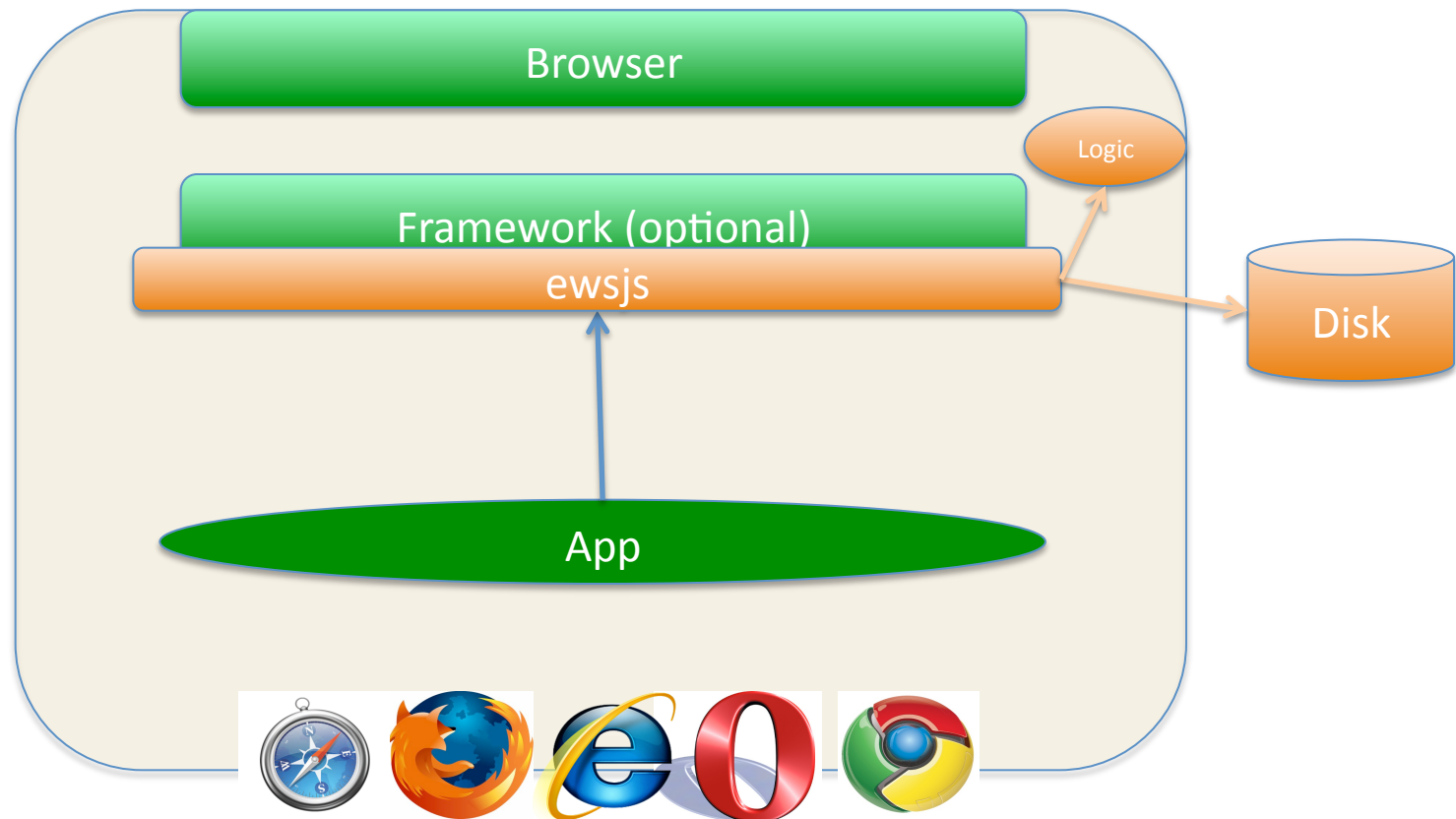
ewsjs: Yes, We Can!

- A Web server...
 - ... in the browser!
- Simulate everything
- Look like a server
- Well-designed clients are ignorant

The Way We Were...



Look, Ma, no server!



INSTALL.txt

1. Download: <http://code.google.com/p/ewsjs>

2. Include ewsjs.js

```
<script src="path/to/ewsjs.js" type="text/javascript"></script>
```

3. Write your own handler logic

4. Include your logic file

```
<script src="path/to/ewsjs-impl.js" type="text/javascript"></script>
```

5. Switch intelligently

Logic?

ewsjs provides

- EWS global
- ajax/get/post/put/delete
- Load from file with caching
- URL rewriting

Your mission, should you...

- Register handlers per path
- Register auto handler
- Register URL rewrites



Register Handlers

- Tell EWS what path to send to which function

```
EWS.registerHandler("/some/path", handler)
```

- Include parameters, if you want

```
EWS.registerHandler("/users/:user/app/:app", handler)
```

- Handler signature

```
handler = function(type, url, data, db, params)
// type: one of "GET", "POST", "DELETE", "PUT"
// url: original url called (not the rewritten one)
// data: parameters of the original request
// db: internal EWS cache
// params: path parameters, e.g. {user: "avi", app: "god"}
```

Register Auto Handler

- Fallback handler

```
EWS.registerAuto(handler)
```

- Handler signature

```
handler = function(type, url, data, db)  
// type: one of "GET", "POST", "DELETE", "PUT"  
// url: original url called (not the rewritten one)  
// data: parameters of the original request  
// db: internal EWS cache
```

Register Rewrites

- JavaScript RegExp or String rewriting
- Change one path to another

```
EWS.registerRewrite("/old/path/abc", "/new/path/abc");
```

- Use RegExp, capture elements

```
EWS.registerRewrite(/^\/old\/path\/(.*)/, "/new/path/$1");
```

Switch Intelligently

- Make sure you call EWS.ajax or similar instead of \$.ajax
- One way: look at your original path

```
var ajax = window.location.protocol === "file:" ? $.ajax : EWS.ajax;
```
- Use ajax() throughout your app

Working Demo

Demo ewsjs Page

This page demonstrates the embedded Web server <http://code.google.com/p/ewsjs> ewsjs library. To use this page, you can do some basic CRUD operations, which map to REST activities, entirely within the browser.

| ID | First Name | Last Name | Delete | Save |
|-----|------------------------------------|-------------------------------------|--|-------------------------------------|
| 1 | <input type="text" value="Mark"/> | <input type="text" value="Hurd"/> | <input type="button" value="Delete"/> | <input type="button" value="Save"/> |
| 3 | <input type="text" value="Jodie"/> | <input type="text" value="Fisher"/> | <input type="button" value="Delete"/> | <input type="button" value="Save"/> |
| NEW | <input type="text"/> | <input type="text"/> | <input type="button" value="Add New"/> | |

Be Productive!

Thanks!

Avi Deitcher

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