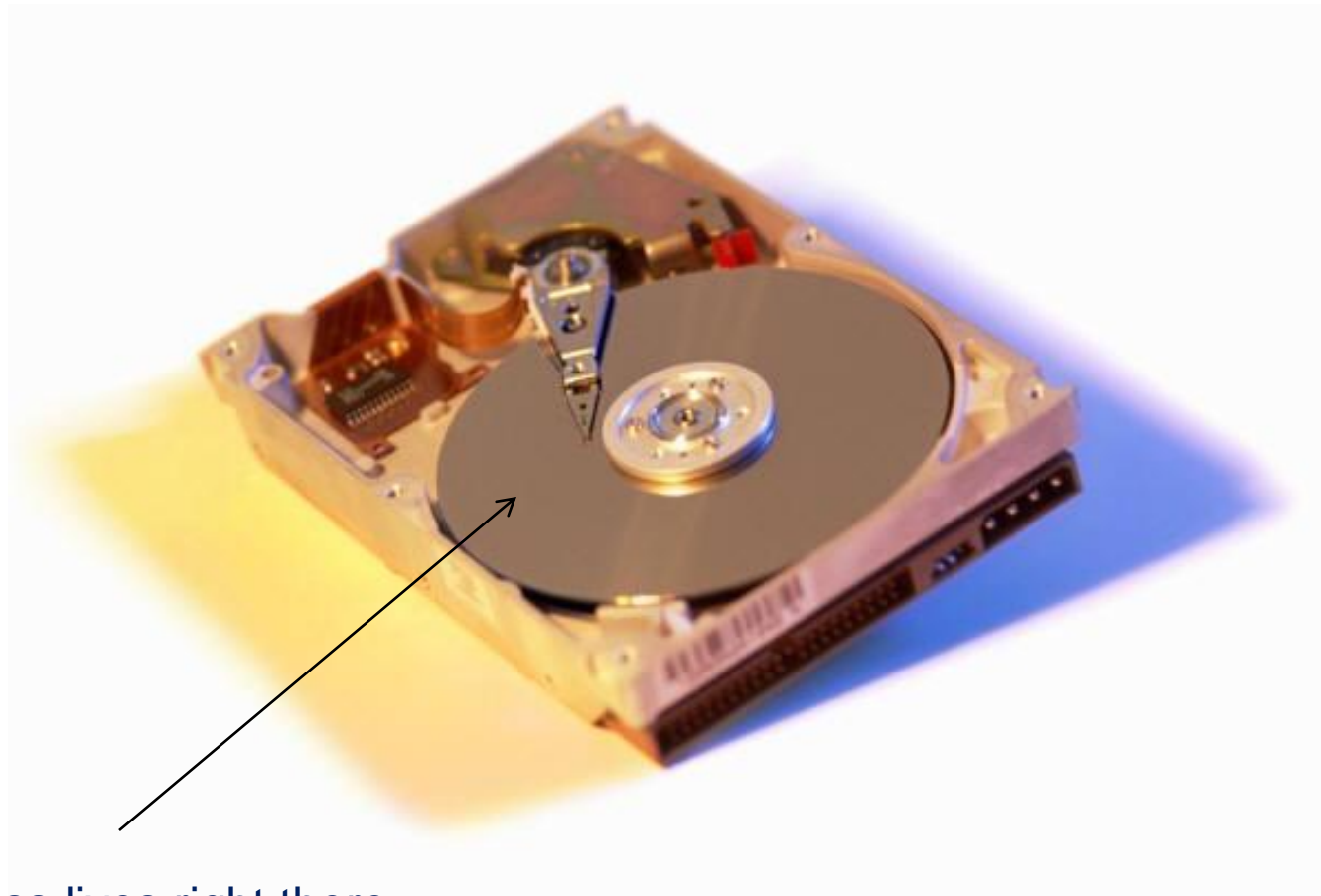


HTTP Architecture

Proxies, Caches, Resources Redux

K. Scott Allen





styles.css lives right there

deep dish pizza - Google M


maps.google.com

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Sign in

Google

deep dish pizza



Map

Traffic

Title:

Ms.

First:

Anne

Last:

Dodsworth

Display:

Anne Dodsworth


Gender:

☒ Male ☐ Female

Street:

7 Houndstooth Rd.

Photo



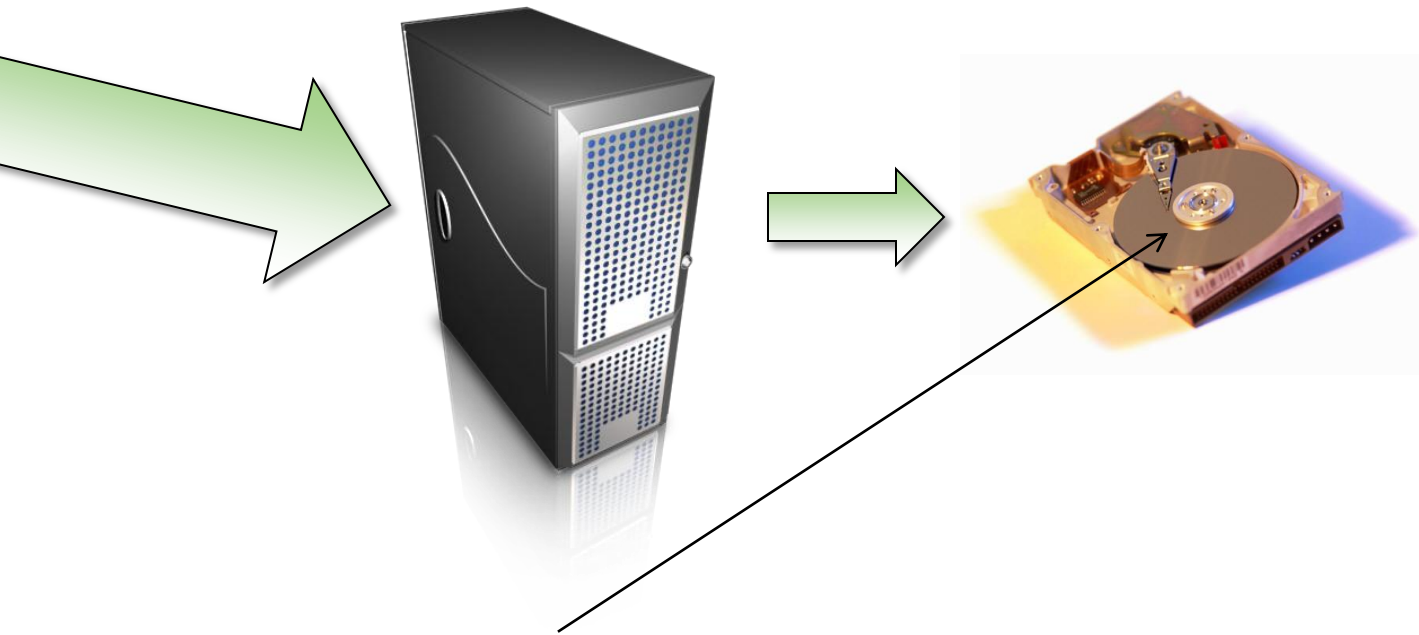
[Browse Picture](#)

<http://maps.google.com/maps?q=deep+dish+pizza>

<http://maps.google.com/maps?q=deep+dish+pizza>

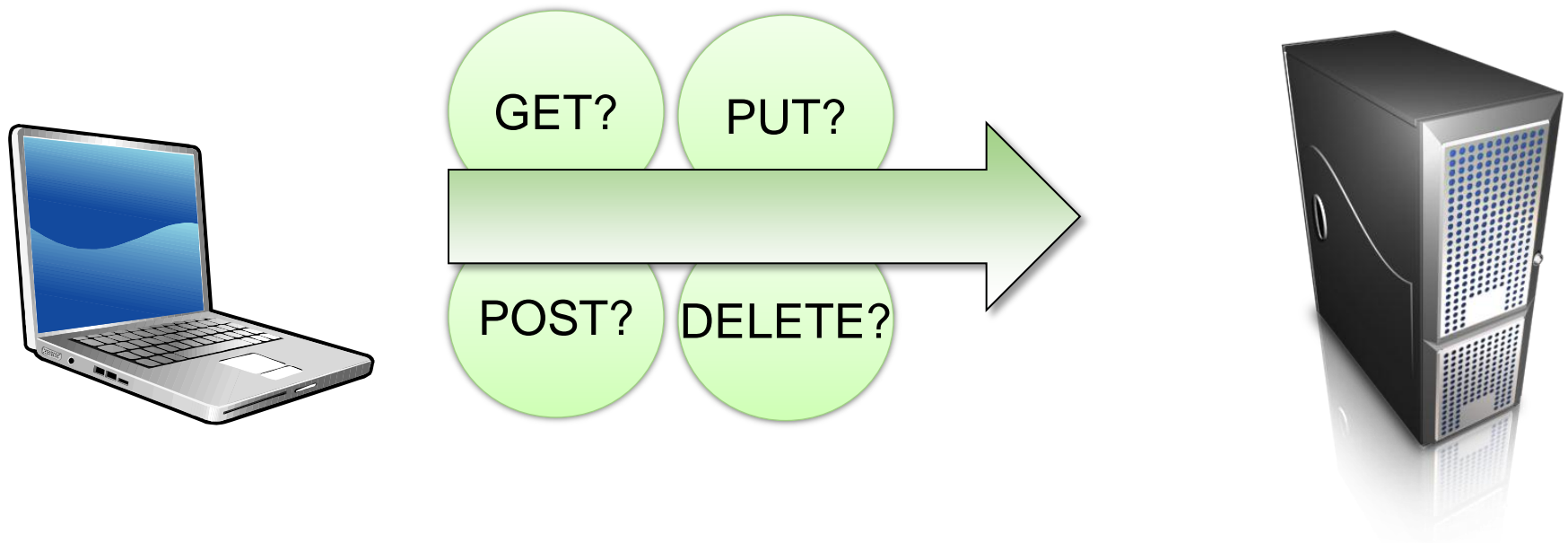


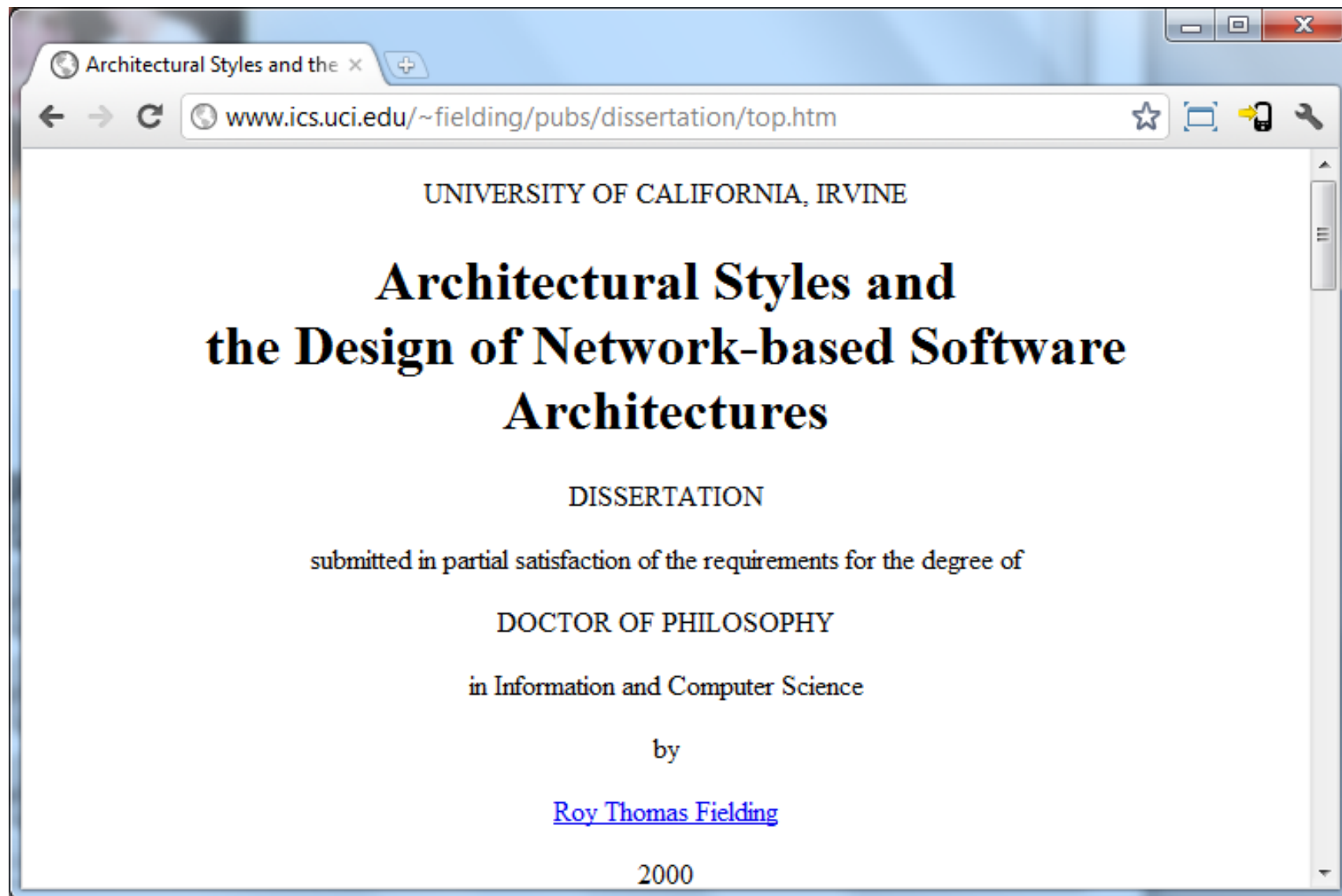
<http://maps.google.com/maps?q=deep+dish+pizza>



giant_map_of_third_planet.svg

<http://maps.google.com/maps?q=deep+dish+pizza>





<http://maps.google.com/maps?q=deep+dish+pizza>

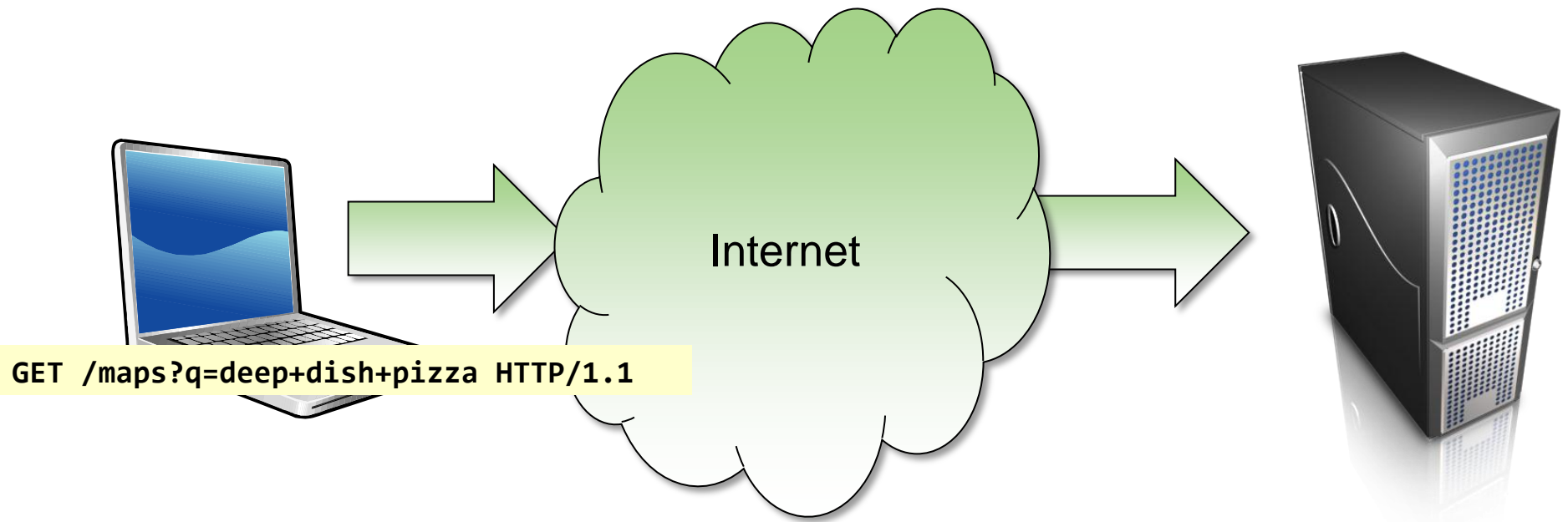


GET /maps?q=deep+dish+pizza HTTP/1.1
Host: maps.google.com
Accept-Language: fr-FR
Dat

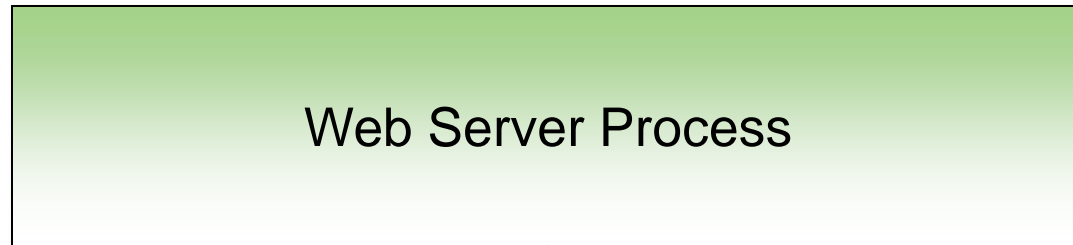
HTTP/1.1 200 OK
Date: Wed, 25 Jan 2012 22:09:33 GMT
Expires: -1
Cache-Control: private, max-age=0
Content-Type: text/html; charset=UTF-8
Content-Encoding: gzip
Content-Length: 68927



<http://maps.google.com/maps?q=deep+dish+pizza>



GET . . .
HOST: maps.com



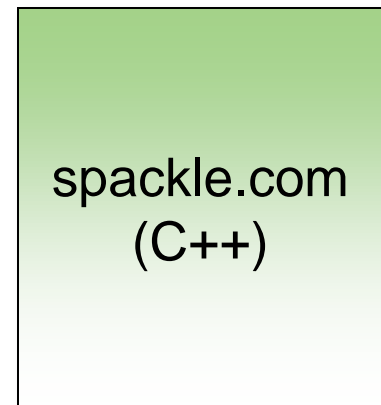
Web Server Process



maps.com
(PHP)



bloviate.com
(ASP)



spackle.com
(C++)



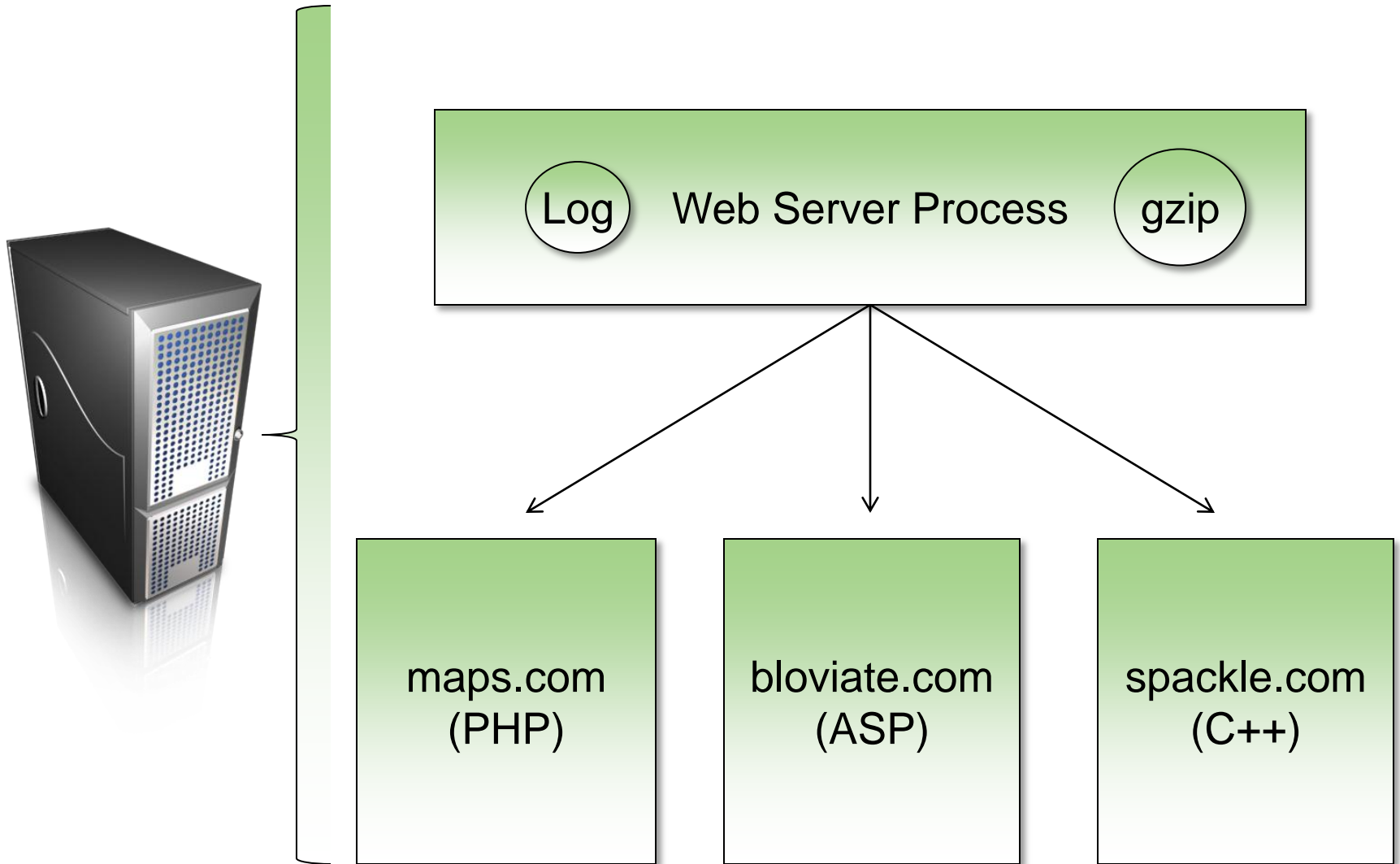
GET . . .
HOST: maps.com

Log

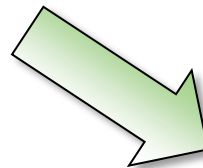
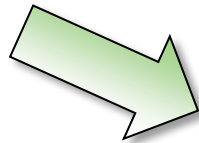
Web Server Process

Compress

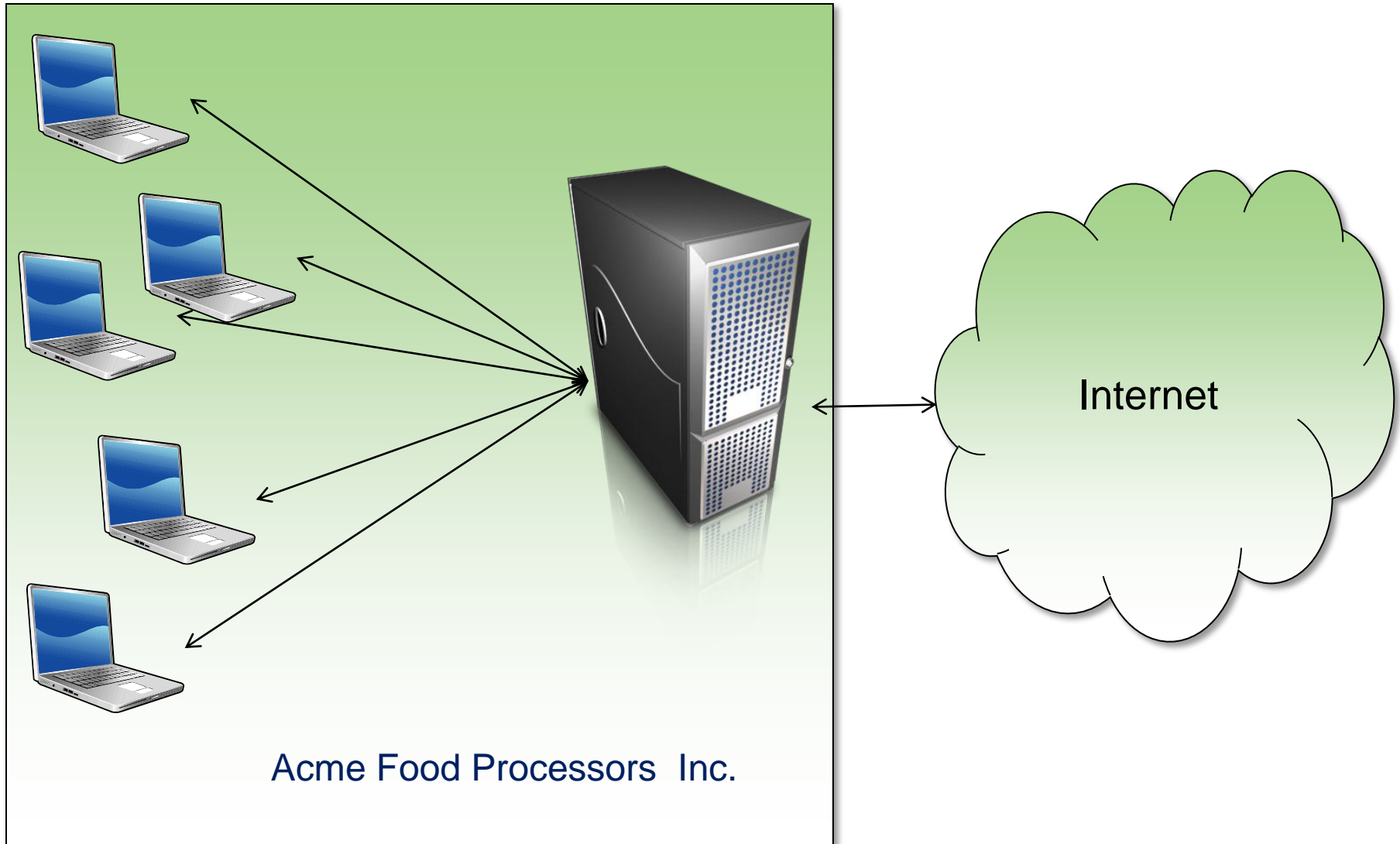
HTTP/1.1 200 OK



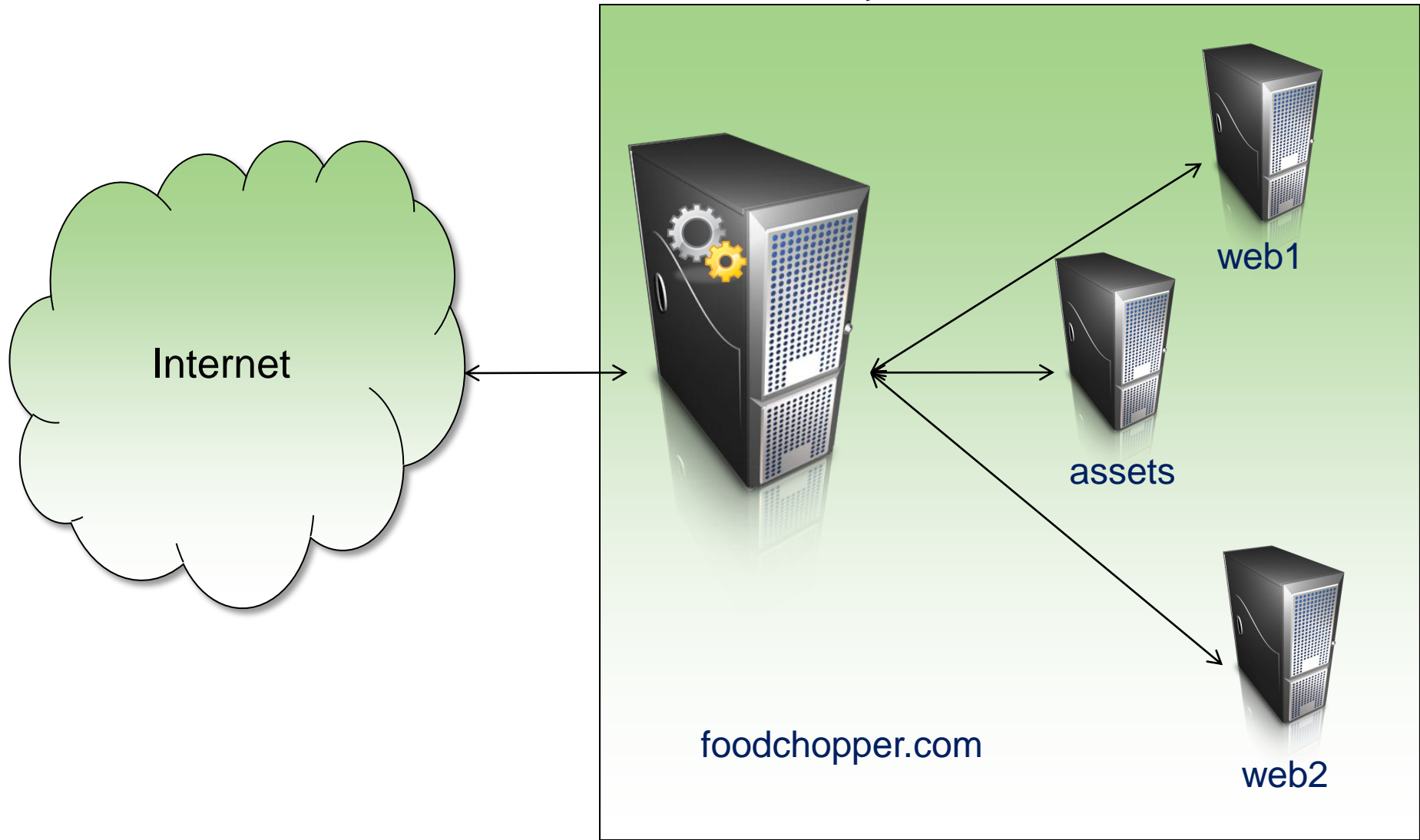
GET . . .
HOST: twitter.com



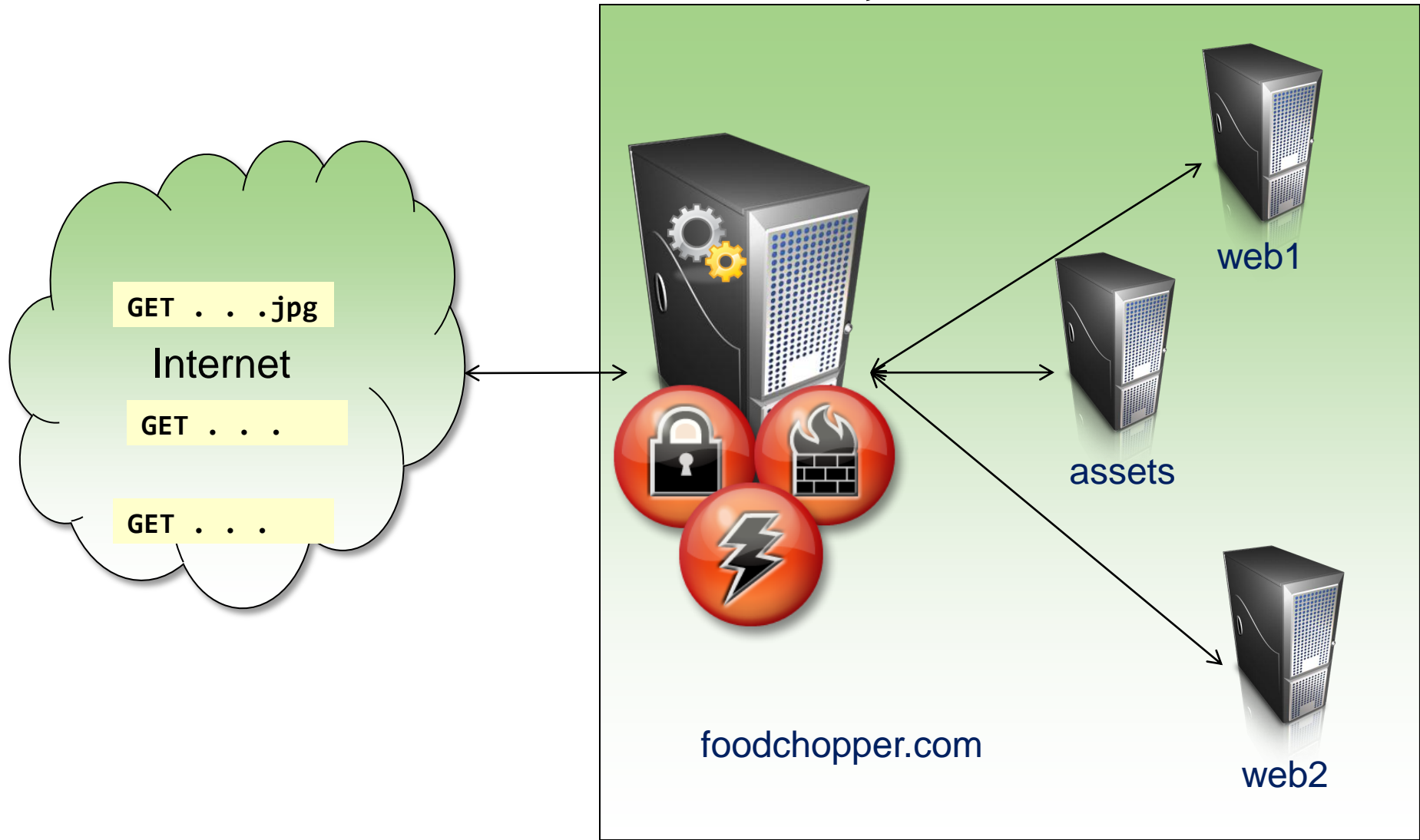
Forward Proxy



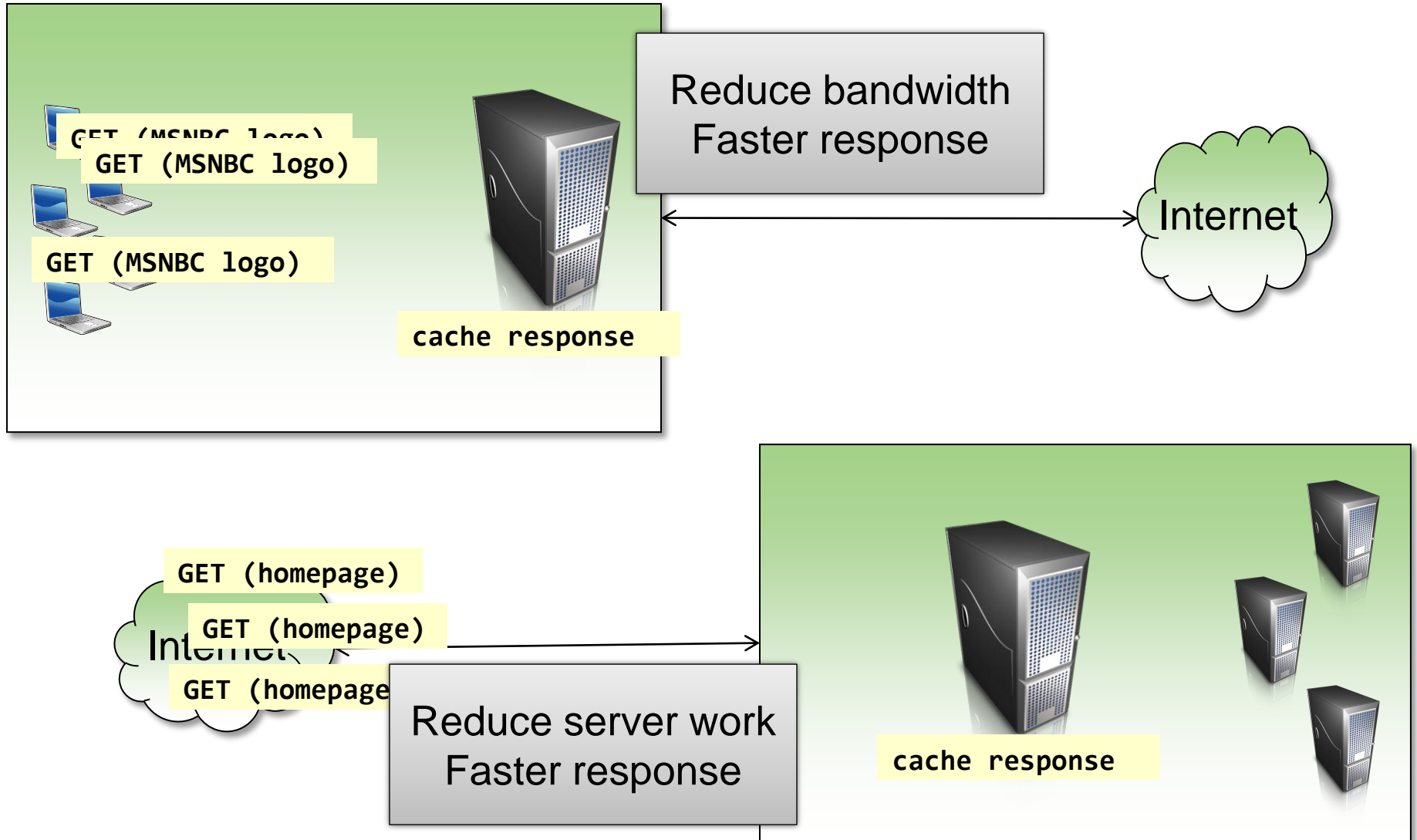
Reverse Proxy



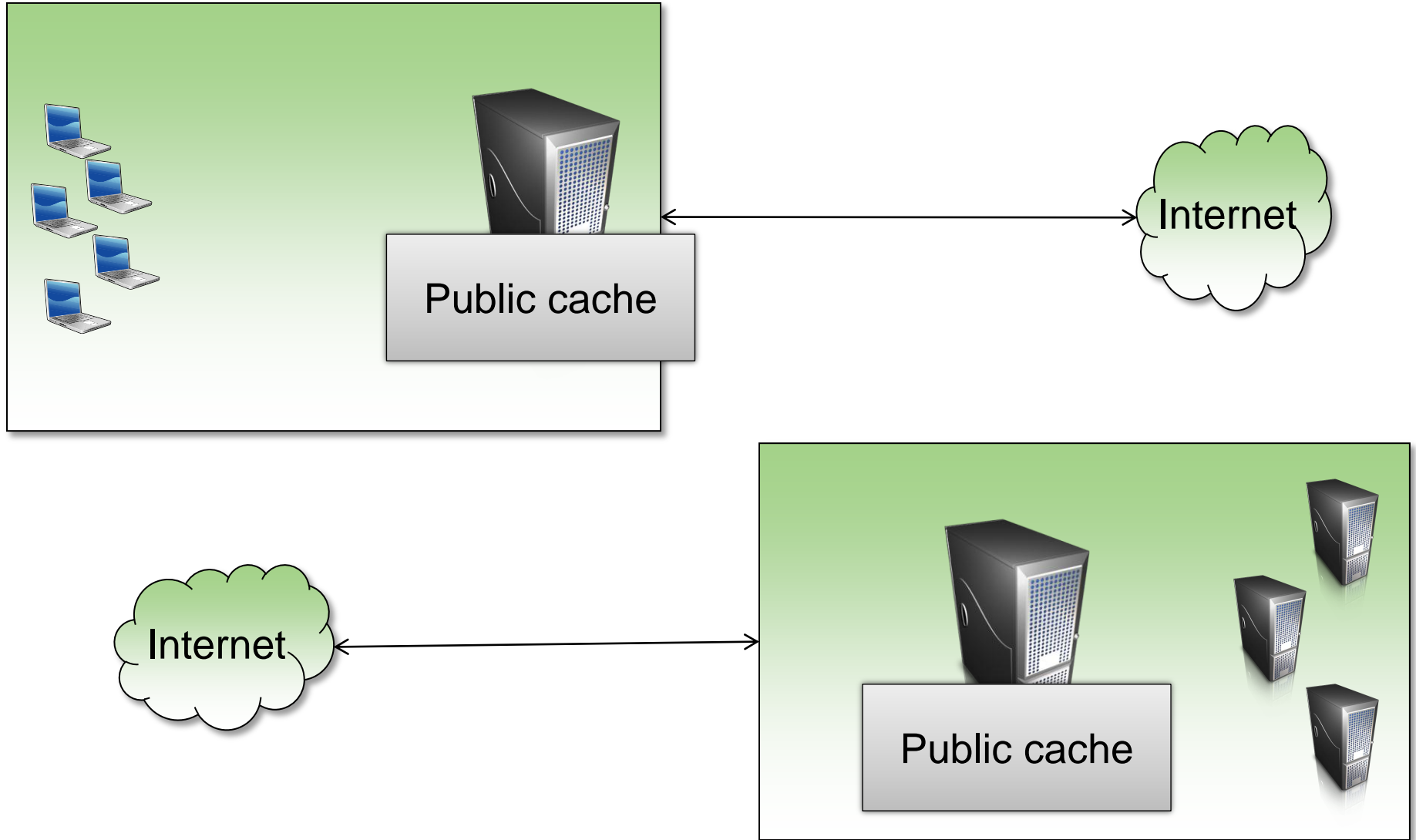
Reverse Proxy

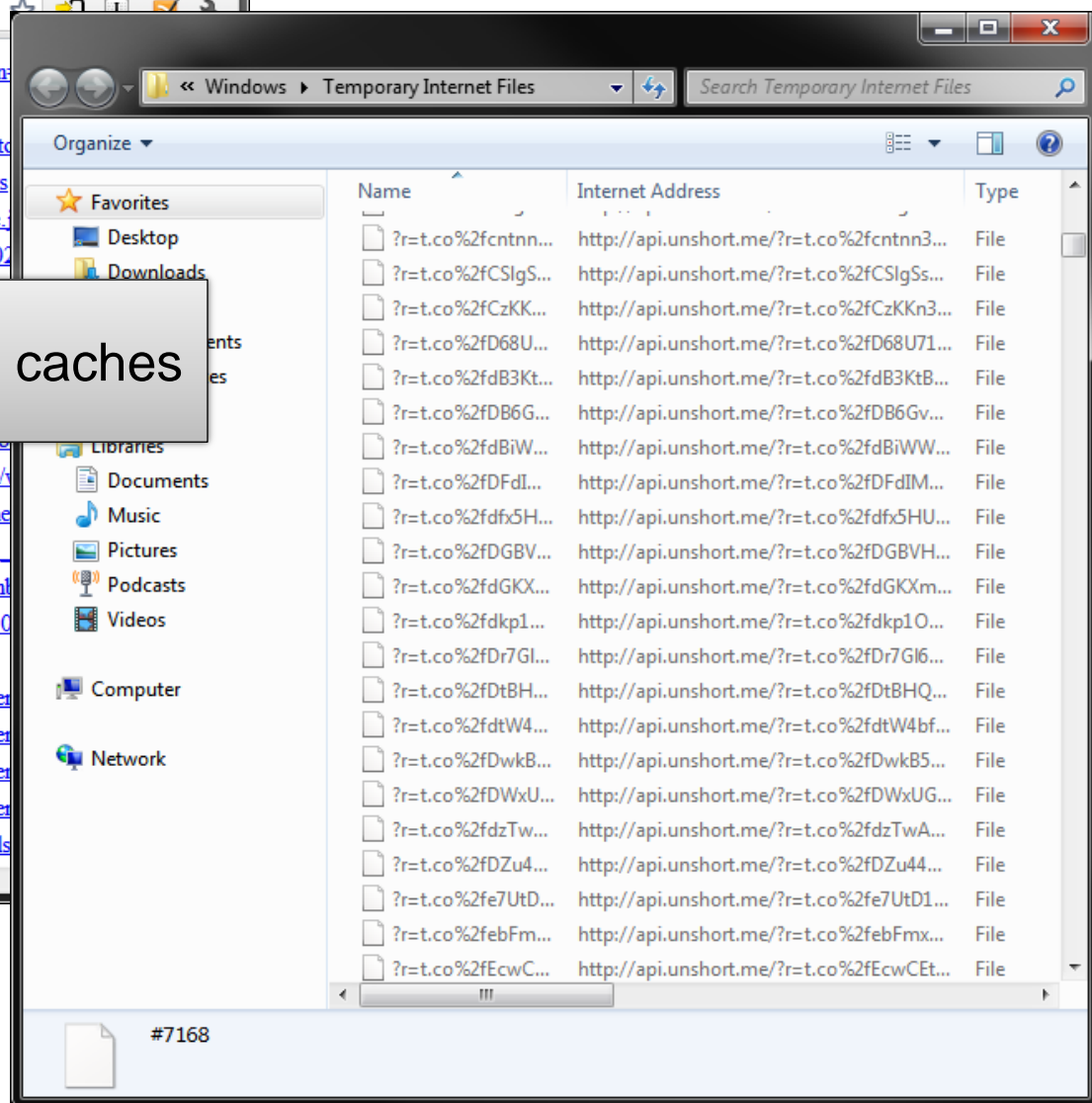
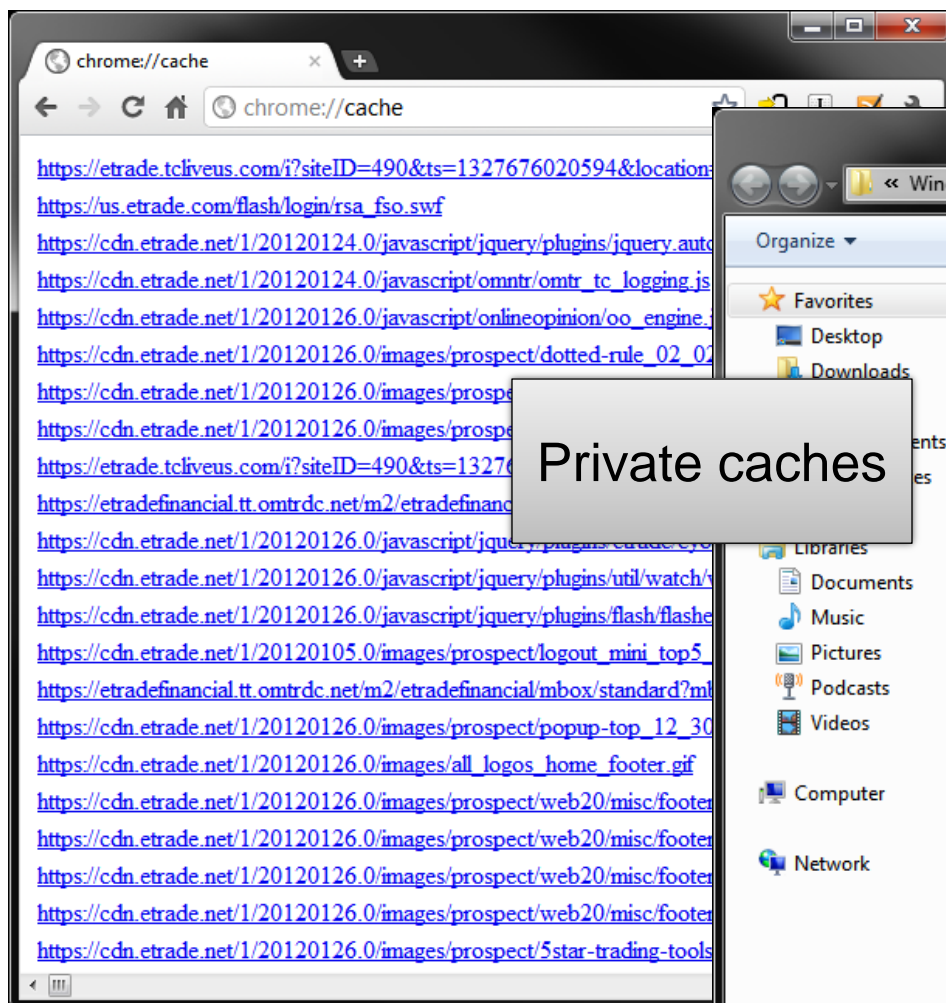


Cache



Cache





HTTP/1.1 200 OK

Date: Wed, 12 Jan 2012 12:09:33 GMT

(response to GET request)

Cache It!

PUT, POST, or DELETE

Don't cache

HTTP/1.1 200 OK

Cache-Control: private, max-age=0

Expires: . . .

Pragma . . .

Content-Type: text/html; charset=UTF-8

Content-Encoding: gzip

Content-Length: 68927

Follow the
instructions ...

Cache Control

| Directive | Meaning |
|-----------|------------------------------|
| public | A response for everyone |
| private | A response for a single user |
| no-cache | Don't cache the response |
| no-store | You never saw this response |

```
Response.Cache.SetCacheability(HttpCacheability.Public);  
Response.Cache.SetExpires(DateTime.Now.AddSeconds(60));
```

```
HTTP/1.1 200 OK  
Content-Type: image/png  
Last-Modified: Tue, 23 Aug 2011 13:28:21 GMT  
Cache-Control: private, max-age=31536000
```

<http://maps.google.com/maps?q=deep+dish+pizza>



```
GET /maps?q=deep+dish+pizza HTTP/1.1
Host: maps.google.com
Accept-Language: fr-FR
Date: Fri, 9 Jul 2012 23:59:59 GMT
```

```
HTTP/1.1 200 OK
Date: Wed, 25 Jan 2012 22:09:33 GMT
Expires: -1
Cache-Control: private, max-age=0
Content-Type: text/html; charset=UTF-8
Content-Encoding: gzip
Content-Length: 68927
```

