

Measuring The Web: How effective is your Web Strategy?



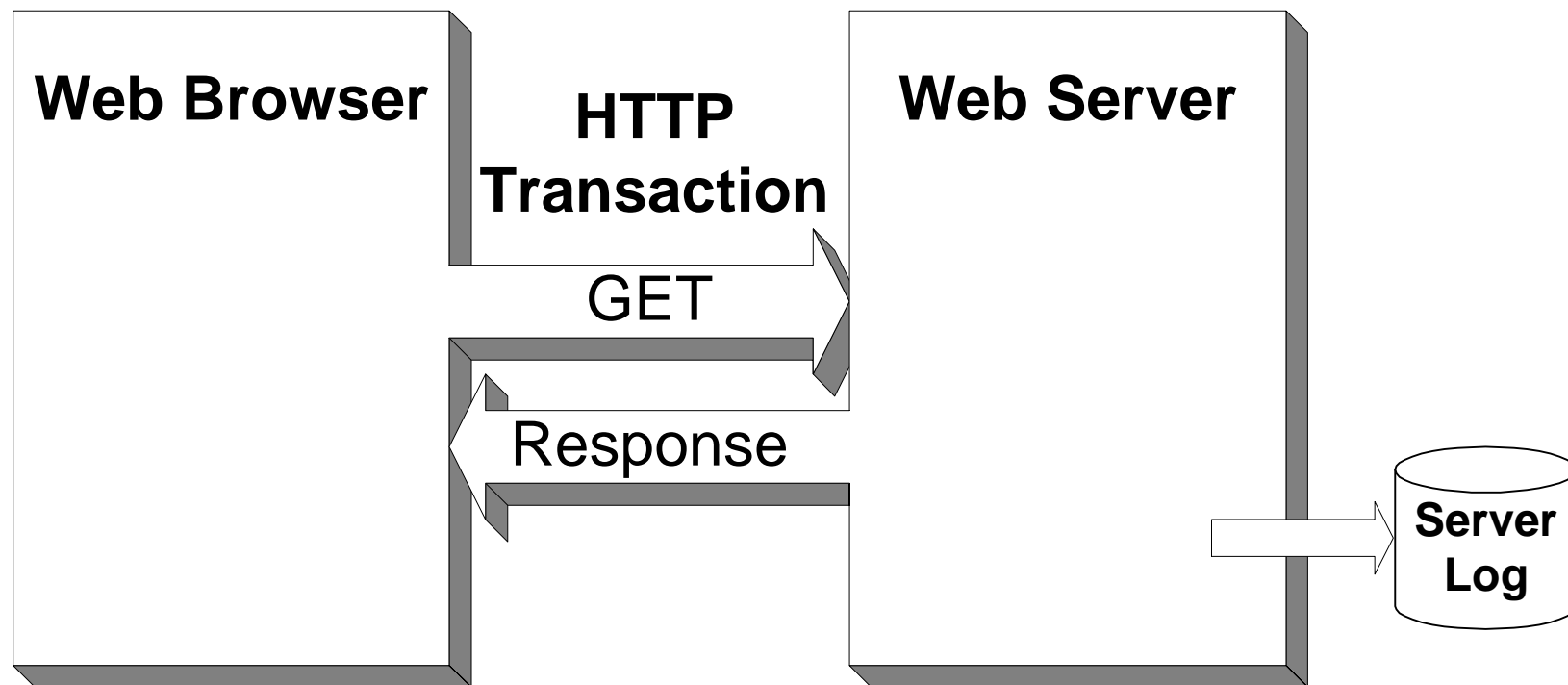
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Topics

- What are we measuring?
- Issues with current techniques
- Browser Based Measurement
- Demographics
- Reporting

Anatomy of a HTTP Transaction



HTTP is stateless

Often called a hit...

Anatomy of a HTTP Transaction

GET /test.html HTTP/1.0

Connection: Keep-Alive

User-Agent: Mozilla/4.0 [en] (Win95; I)

Pragma: no-cache

Host: www.apms.com.au

Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, */*

Accept-Language: en

Accept-Charset: iso-8859-1,*,utf-8

Cookie: RMID=cb0c2e7a33ed19b0

HTTP/1.1 200 OK

Date: Mon, 08 Sep 1997 00:30:38 GMT

Server: Apache/1.2.1

Connection: close

Content-Type: text/html

<html><head>

<title>APMS Test Page</title>

</head>

<body>

<h1>APMS Test Page</h1>

This is a test page.

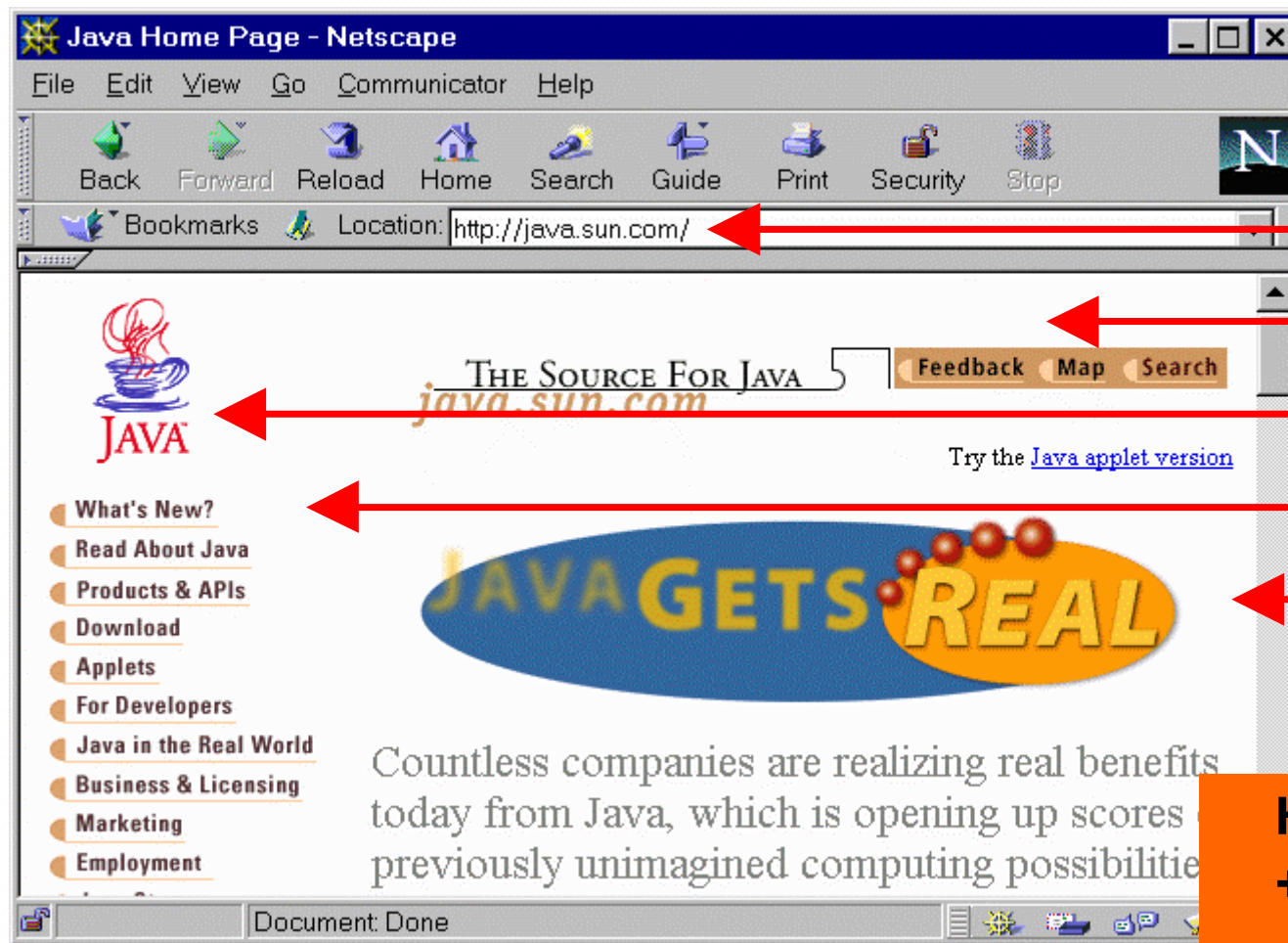
</body></html>

Anatomy of a HTTP Transaction

- Server log record:

```
iago.apms.com.au - - [08/Sep/1997:11:39:35 +1000]  
"GET /test.html HTTP/1.0" 200 121  
www.apms.com.au "-" "Mozilla/4.0 [en] (Win95; I)"
```

Loading a page



Web Server

.html

.gif

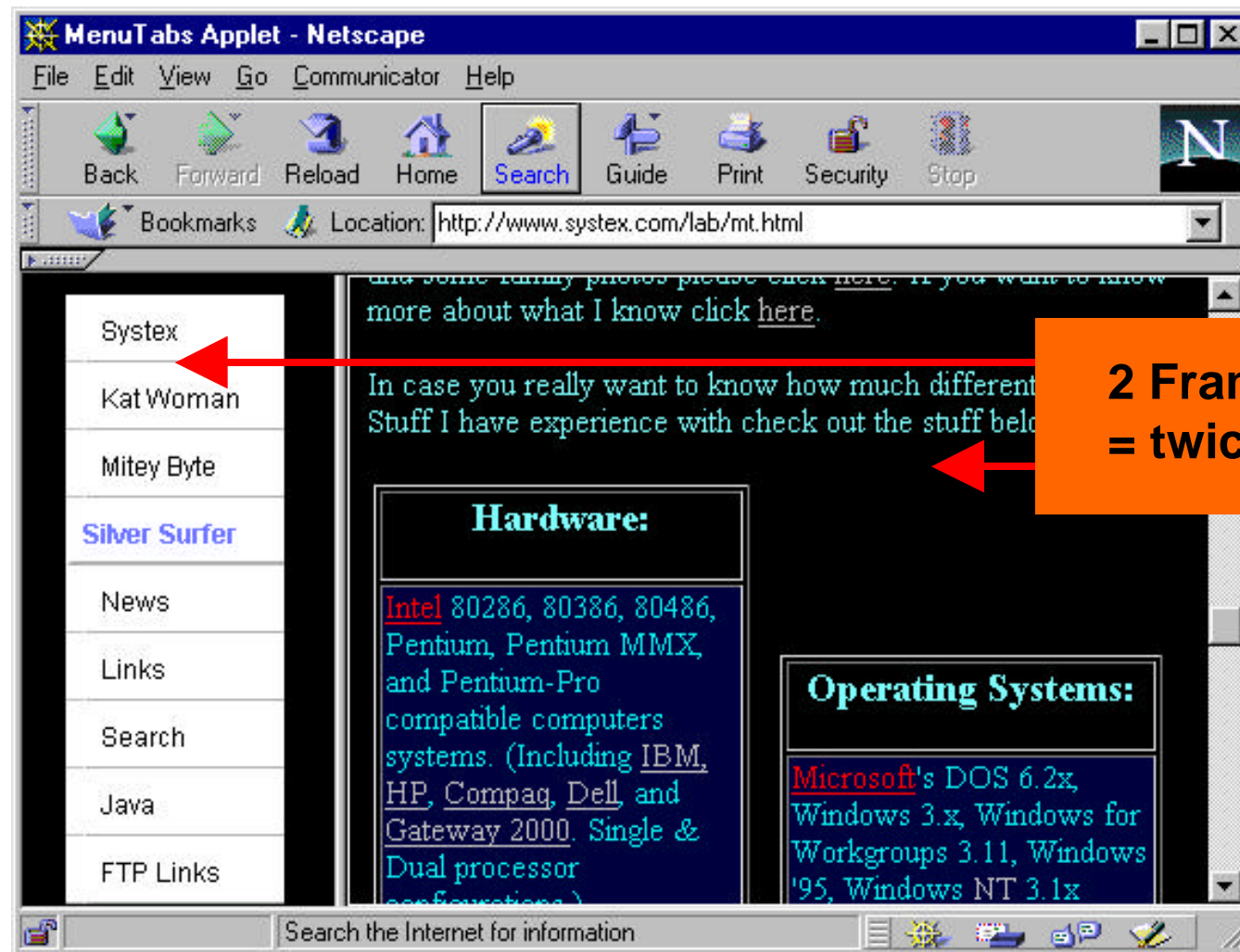
.gif

.gif

.gif

**Html page
+ 4 images
= 5 hits**

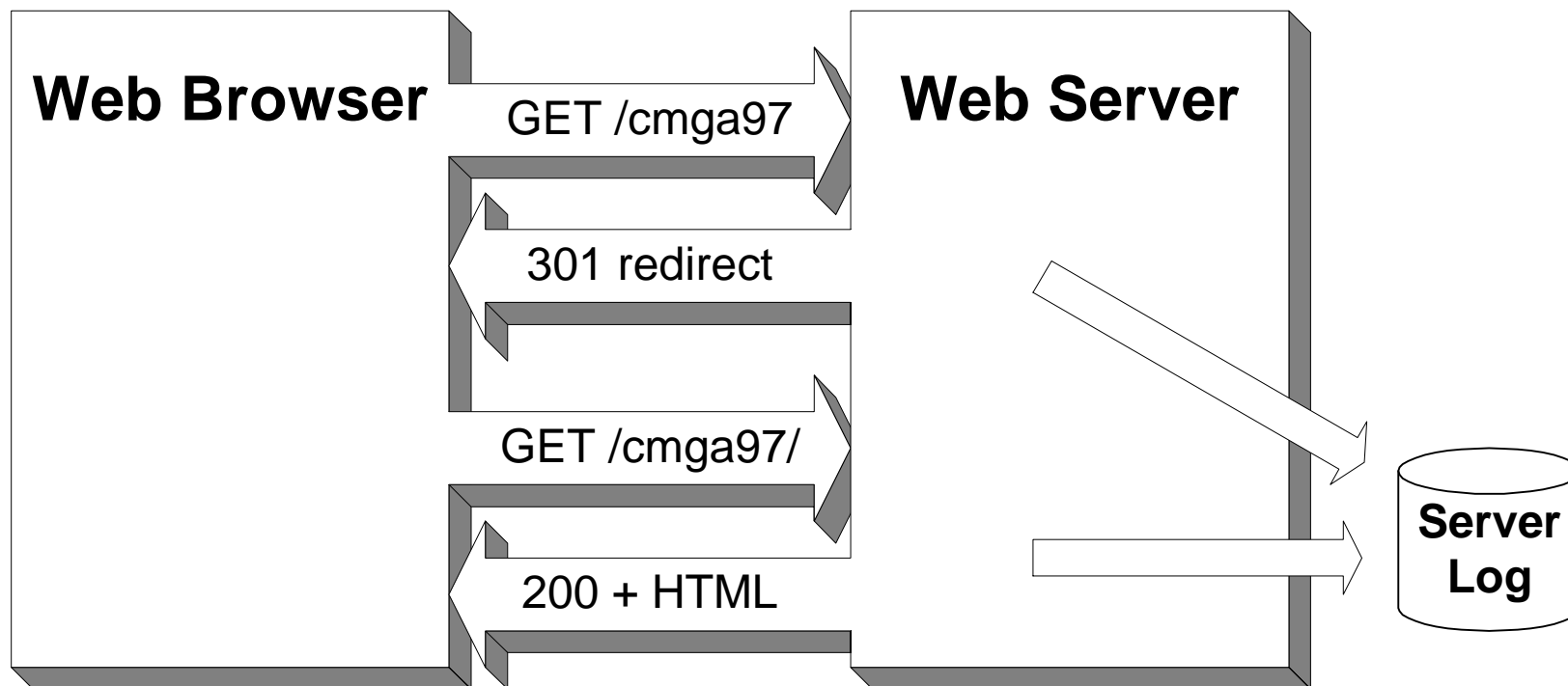
Frames



2 Frames
= twice the problem

Misleading server log

<http://www.cmga.org.au/cmga97>



Counts as two hits (depending on analysis software)...

Page View

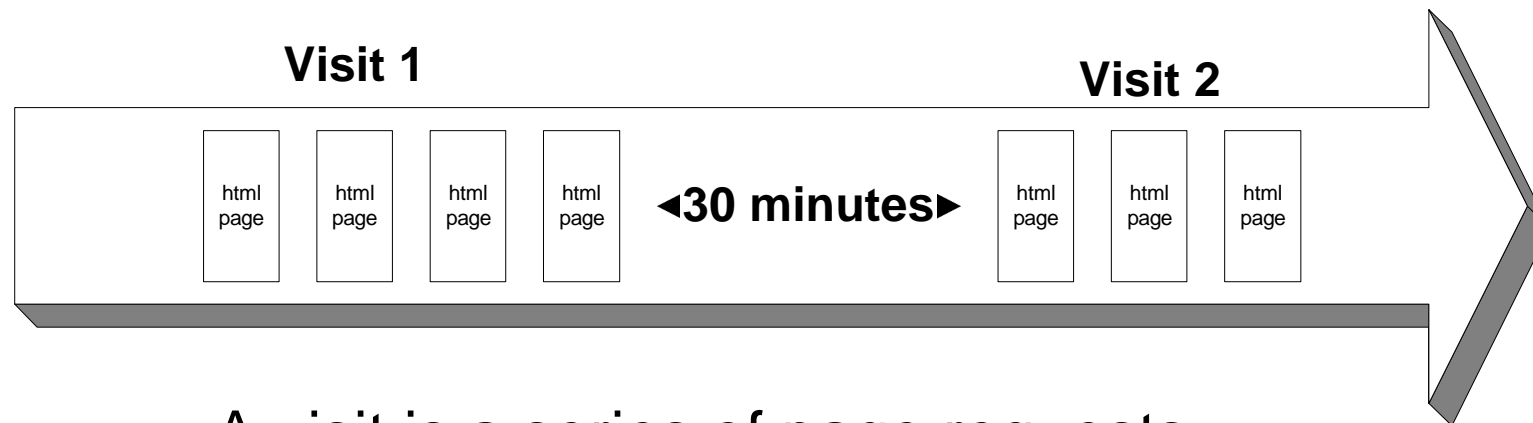
Table 14: Summary of Proposed Metrics for Web Measurement

	Vehicle level	Page level	Ad Level
Exposure Metrics	Site Exposures Site Exposure Duplication Site Reach Site Frequency	Page Exposures Page Reach Page Frequency	Banner Ad Exposures Target Ad Exposures Banner Ad Reach Target Ad Reach Banner Ad Reach Duplication Banner Ad Fr Target Ad Fre Banner Ad Visit

Hits are a meaningless measure...

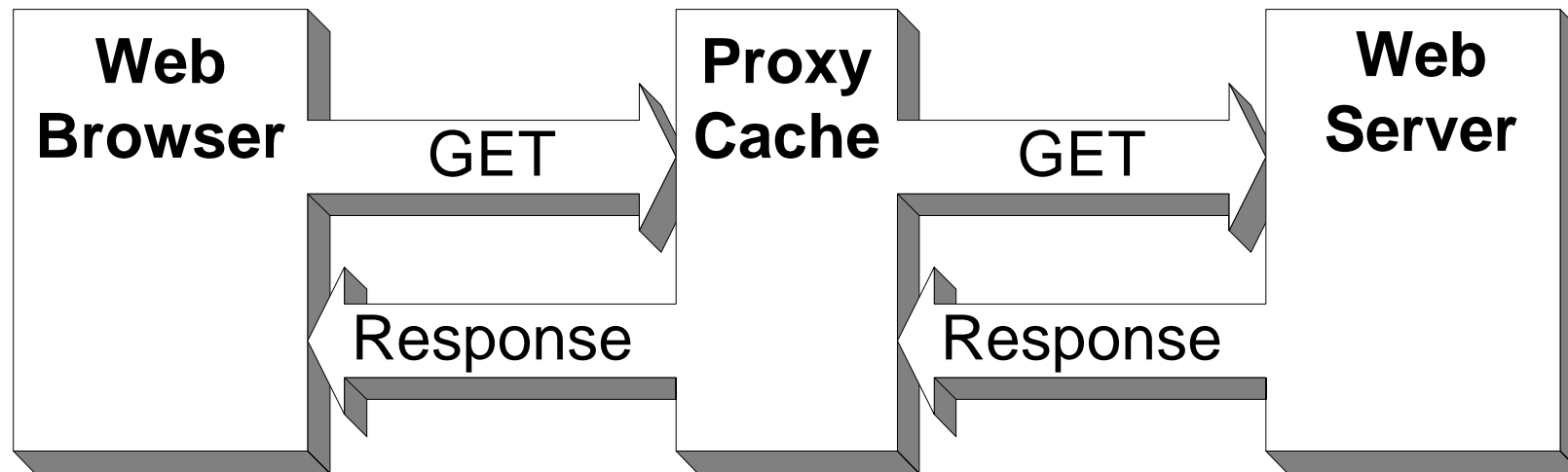
Measure what the user is seeing...

Visits



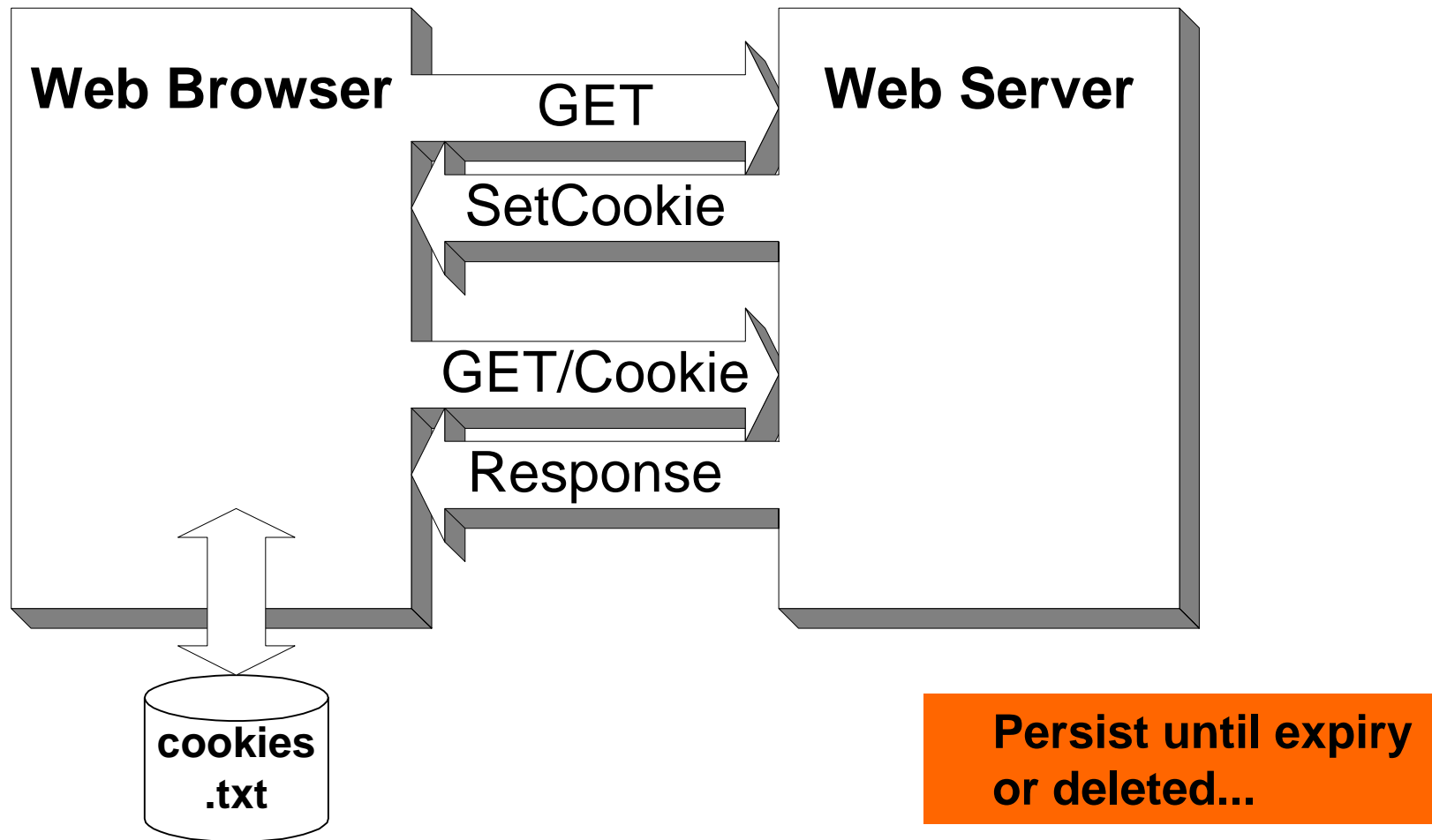
A visit is a series of page requests from a single user. A new visit is recorded if there is a gap of more than 30 minutes between requests.

Visits - the problem identifying users

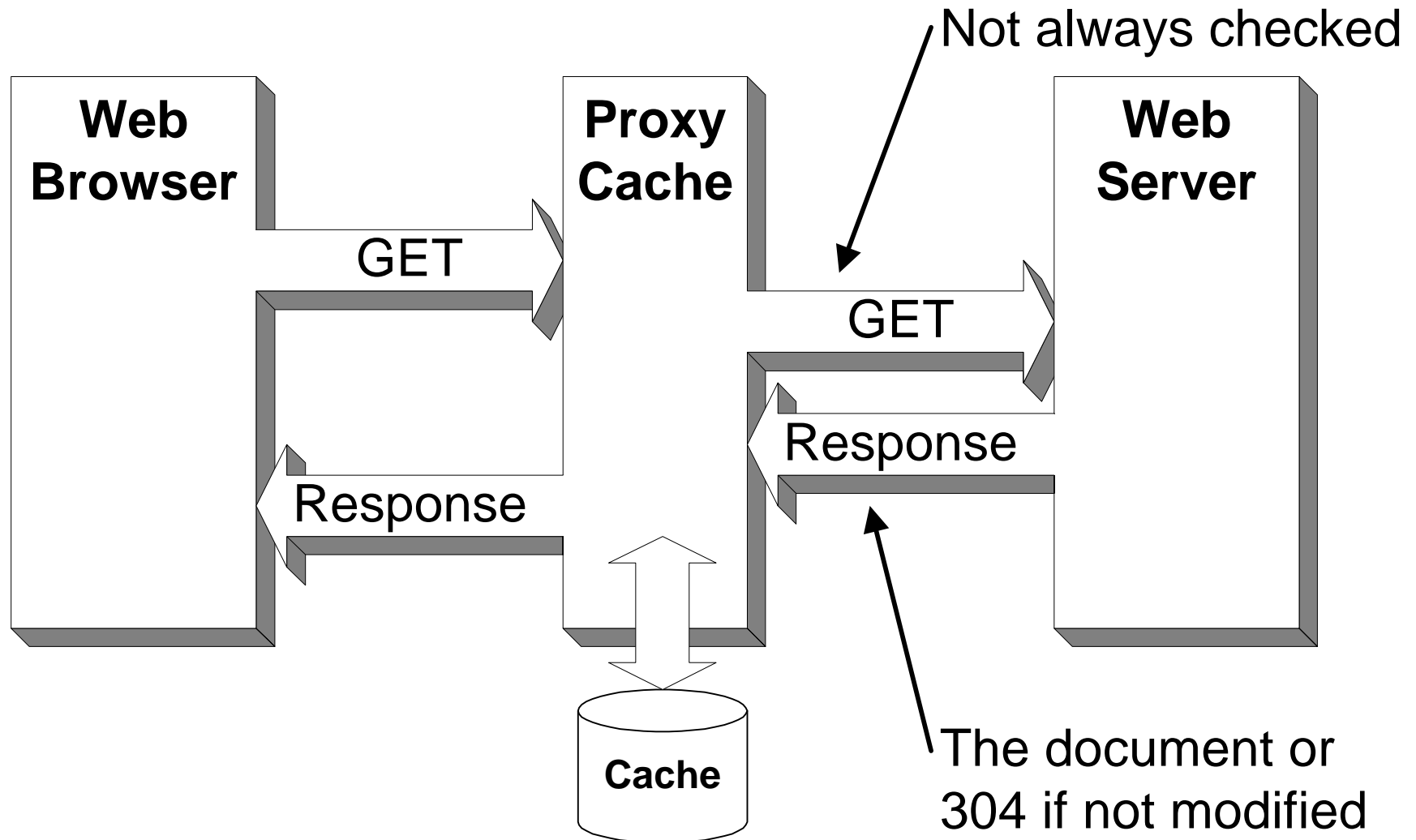


gatekeeper.abc.net.au - - [28/Aug/1997:10:40:39 +1000]
"GET /cmga97/blustar1.gif HTTP/1.0" 200 1470
www.cmga.org.au "http://www.cmga.org.au/cmga97/"
"Mozilla/3.0 (Macintosh; I; PPC) **via proxy gateway**
CERN-HTTPD/3.0 libwww/2.17"

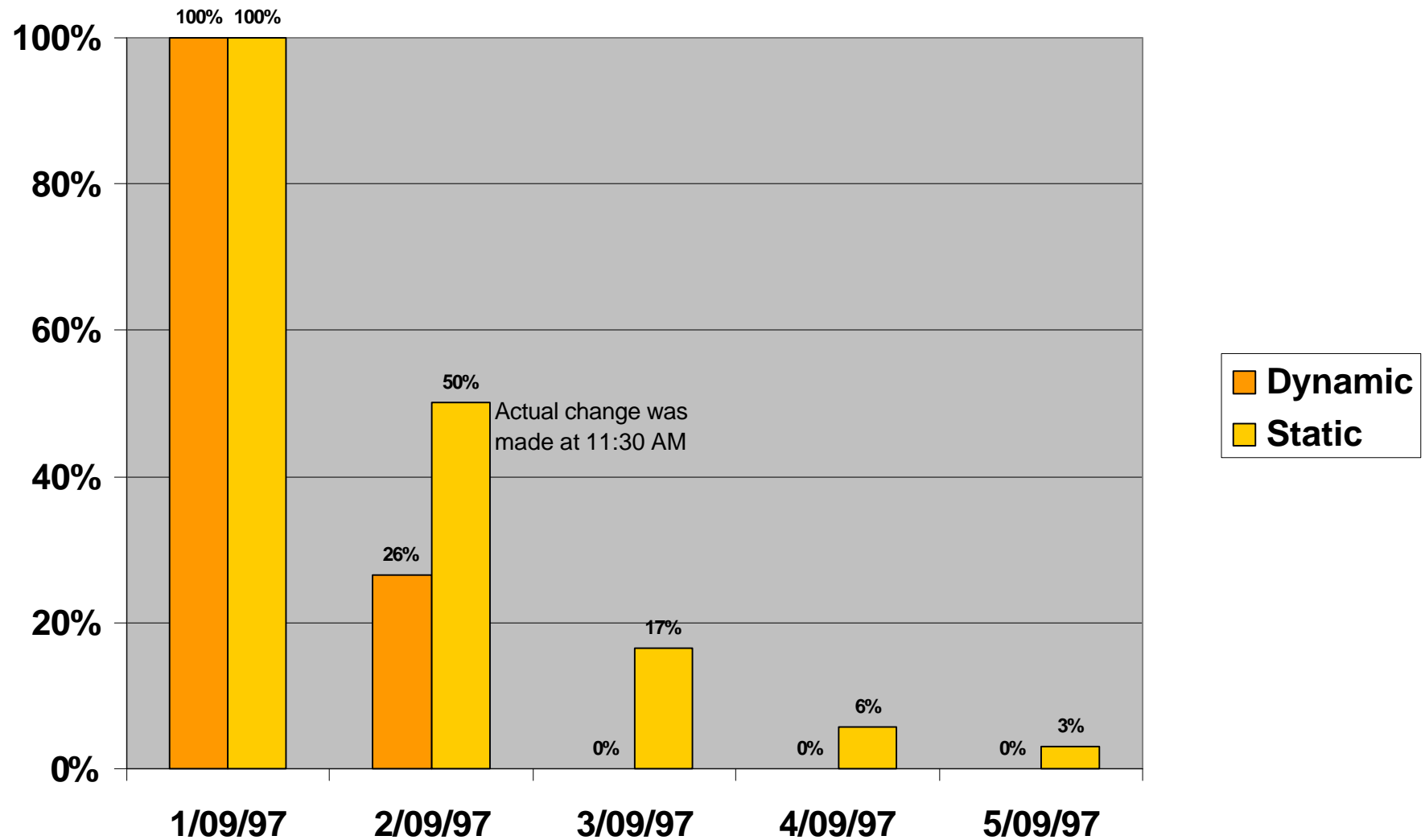
Visits - what about cookies?



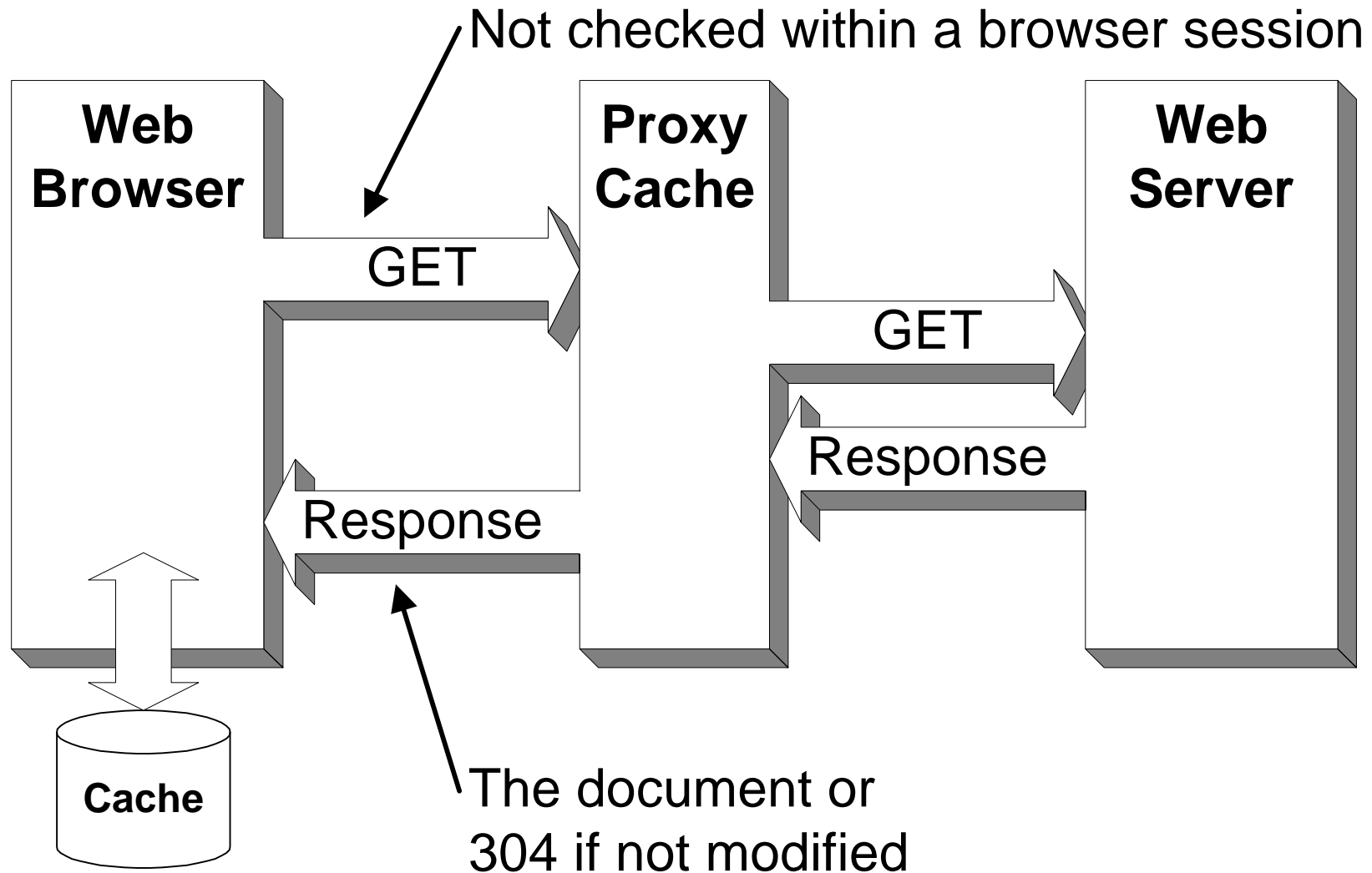
Proxy cache



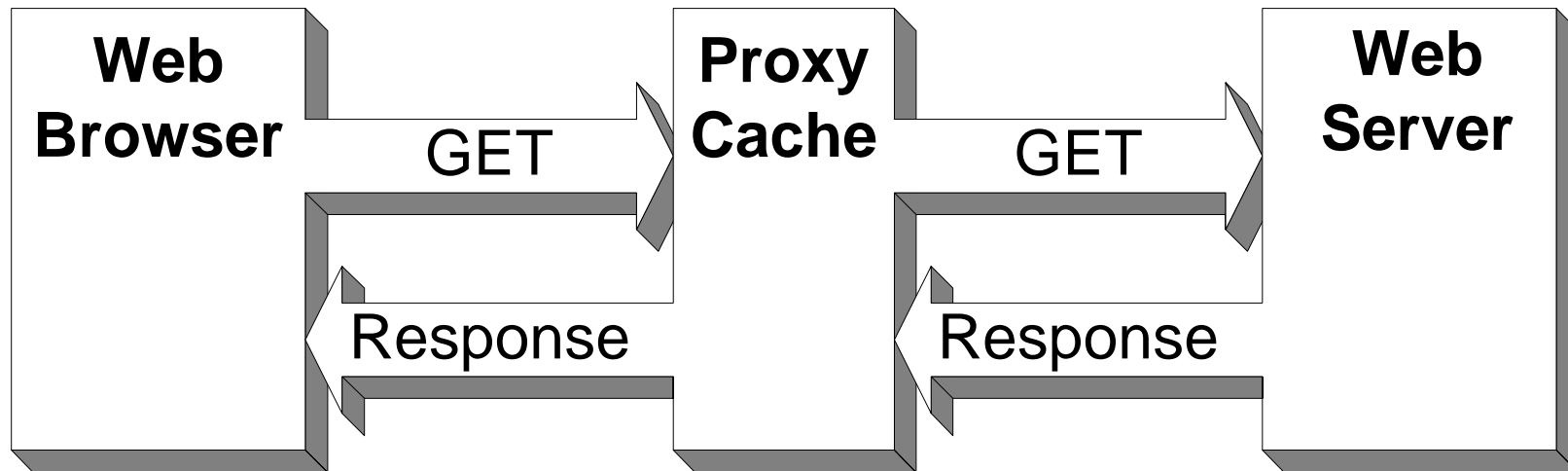
The impact of proxy cache



Browser Cache



Browser Based Measurement



- See what the user is seeing...

Browser Based Measurement

- Instrument pages with Java (with CGI fallback):

```
<applet code="PageGather.class" codebase="http://xyz.com:8888">  
<param name="url" value="http://www.xyz.com.au/index.html">  
  
</applet>
```

- Better able to measure visits.
- Must maintain instrumentation (automate as much as possible).

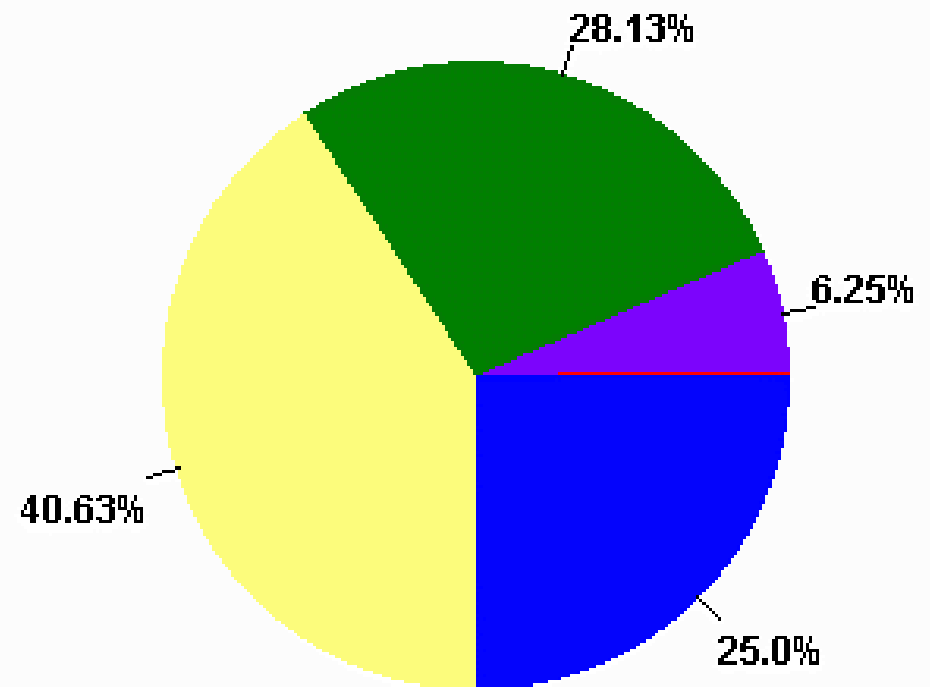
Demographics

- Ask your visitors about themselves - they may not be who you think they are!
- Basic data:
 - Age
 - Sex
 - Work Status
 - Country
 - Income
- Watch out for self-selection.

Demographics

Q2. Which of the following groups best represents your age?

- 12 years or under
- 13 to 19 years
- 20 to 29 years
- 30 to 39 years
- 40 to 49 years
- 50 to 59 years
- 60 years plus



Reporting

- Immediate online access to reports (use the Web!).
- Deliver to users.
- Understandable by a non-technical audience (i.e. Managers and Marketing staff).
- Flexible / Customisable / etc.
- Access to historical data.

Conclusions

- Measure page views not hits.
- Measure as close to the user as possible.
- Ask your visitors about themselves - they may not be who you think they are!
- The web is no different to any other part of the business. The primary purpose of measurement is to help make better business decisions.

References/Further Reading

- Standards

World Wide Web Consortium

<http://www.w3.org/>

Hypertext Transfer Protocol (HTTP) -- HTTP/1.1

<http://www.w3.org/Protocols/rfc2068/rfc2068>

- Other Papers

Caching - Friend or Foe? The challenge of the 4.0 browsers (August 1997)

<http://www.cyberatlas.com/column2.html>

Demographics - Who's on the Net in the US?

<http://www.cyberatlas.com/demographics.html>

New Metrics for New Media: Toward the Development of Web Measurement Standards

http://www2000.ogsm.vanderbilt.edu/novak/web_standards/webstand.html

Audience measurement on the Web: I know you're out there, I can hear you clicking (October 1995)

<http://www.io.org/~adnews/insight/wwwmeasure.html>

References/Further Reading

- Other Papers (cont)

Sample Web Site Audit

<http://www.bpai.com/audits/reports/jo44aom7.pdf>

Random Sampling of users (with diagram)

http://www.npd.com/c_onlineselect.htm

Counting on the Web -- Web Tracking and Measurement

An overview of web based traffic tracking and measurement

<http://www.intervis.com/theview.htm>

More Than Just Hits

<http://techweb.cmp.com/iw/608/08ioweb.htm>

Hit-or-Miss Measurement

http://www.demographics.com/Publications/MT/97_MT/9703_MT/MT97036.htm

Persistent client state HTTP cookies

http://www.netscape.com/newsref/std/cookie_spec.html

Commercialization of the World Wide Web: The Role of Cookies

<http://www2000.ogsm.vanderbilt.edu/cb3/mgt565a/group5/paper.group5.paper2.htm>

On the web...

- After the conference, you will be able to get a copy of this presentation from the CMGA web site:

<http://www.cmga.org.au/proceedings/html/cmga97.html>