

Test Cases

(1) a cache hit returns the saved data to the requester

<client 1>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:45:53 10/29/23)
:: ./client 127.0.0.1 8000 web.mit.edu/dimitrib/www/datanets.html
```

<client 2>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:47:35 10/29/23)
:: ./client 127.0.0.1 8000 web.mit.edu/dimitrib/www/datanets.html
Receive Error:: Success
```

<server>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:32:28 10/29/23)
:: ./server 127.0.0.1 8000
Server socket is created.
Listen successful.
Waiting...
Message sent from Client:
GET /dimitrib/www/datanets.html HTTP/1.0
Host:web.mit.edu

Cache missed.
Passing HTTP request to the web server
GET /dimitrib/www/datanets.html HTTP/1.0
Host: web.mit.edu

Request passed to the web server.
Recieved response from the web server.
Passed the file to the client.
Sent file to the client
*****
=====CACHE LIST=====
0. web.mit.edu/dimitrib/www/datanets.html
Expires: Mon, 30 Oct 2023 03:48:11 GMT
Modified Time Stamp: Mon, 30 Oct 2023 03:46:11 GMT
File Name: datanets.html
=====END LIST=====
Message sent from Client:
GET /dimitrib/www/datanets.html HTTP/1.0
Host:web.mit.edu

File found in cache.
Sending file to the client...
File sent to the client.
=====CACHE LIST=====
0. web.mit.edu/dimitrib/www/datanets.html
Expires: Mon, 30 Oct 2023 03:48:11 GMT
Modified Time Stamp: Mon, 30 Oct 2023 03:47:43 GMT
File Name: datanets.html
=====END LIST=====
```

→ When the client 1 makes a new request, the proxy server stores the entry to the cache list. Then client 2 makes the same request, and the proxy server recognizes the request from the cached list and retrieves the file from the cached list.

(2) a request that is not in the cache is proxied, saved in the cache, and returned to the requester

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:45:53 10/29/23)
:: ./client 127.0.0.1 8000 web.mit.edu/dimitrib/www/datanets.html

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:46:11 10/29/23)
:: █
```

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (22:32:28 10/29/23)
:: ./server 127.0.0.1 8000
Server socket is created.
Listen successful.
Waiting...
Message sent from Client:
GET /dimitrib/www/datanets.html HTTP/1.0
Host:web.mit.edu

Cache missed.
Passing HTTP request to the web server
GET /dimitrib/www/datanets.html HTTP/1.0
Host: web.mit.edu

Request passed to the web server.
Recieved response from the web server.
Passed the file to the client.
Sent file to the client
*****
=====CACHE LIST=====
0. web.mit.edu/dimitrib/www/datanets.html
Expires: Mon, 30 Oct 2023 03:48:11 GMT
Modified Time Stamp: Mon, 30 Oct 2023 03:46:11 GMT
File Name: datanets.html
=====END LIST=====
```

→ We can see that the first request for the url “web.mit.edu/dimitrib/www/datanets.html” triggers cache miss and the proxy server passes the request to the actual server. The proxy server gets the file, and saves it in the cache list. Finally it passes the file to the client.

(3) a cache miss with 10 items already in the cache is proxied, saved in the LRU location in cache, and the data is returned to the requester;

<client>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:15 10/29/23)
:: ./client 127.0.0.1 8000 man7.org/linux/man-pages/man3/strtime.3.html
[Sun Oct 29 23:20:20 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:21 10/29/23)
:: ./client 127.0.0.1 8000 www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
[Sun Oct 29 23:20:27 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:27 10/29/23)
:: ./client 127.0.0.1 8000 www.conference-service.com/conferences/networks.html
[Sun Oct 29 23:20:34 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:34 10/29/23)
:: ./client 127.0.0.1 8000 tools.ietf.org/html/rfc194
[Sun Oct 29 23:20:39 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:39 10/29/23)
:: ./client 127.0.0.1 8000 www.tamu.edu/index.html
[Sun Oct 29 23:20:55 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:20:55 10/29/23)
:: ./client 127.0.0.1 8000 web.mit.edu/dimitrib/www/datanets.html
[Sun Oct 29 23:21:16 2023] Request sent. Waiting for response...
[Sun Oct 29 23:21:16 2023] Received 200 OK. Content not modified.
```

<server before 11th request>

```
Request passed to the web server.
Received response from the web server.
Passed the file to the client.
Sent file to the client
*****
=====CACHE LIST=====
0. web.mit.edu/dimitrib/www/datanets.html
Expires: Mon, 30 Oct 2023 04:21:50 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:19:50 GMT
File Name: datanets.html
1. www.evanjones.ca/crc32c.html
Expires: Mon, 30 Oct 2023 04:21:55 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:19:55 GMT
File Name: crc32c.html
2. www.codeincodeblock.com/2011/06/mini-project-snake-game-in-c.html
Expires: Mon, 30 Oct 2023 04:20:01 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:00 GMT
File Name: mini-project-snake-game-in-c.html
3. www.cs.cornell.edu/~tomf/notes/cps104/twoscomp.html
Expires: Mon, 30 Oct 2023 04:22:05 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:05 GMT
File Name: twoscomp.html
4. www.mcs.anl.gov/~kazutomo/rdtsc.html
Expires: Mon, 30 Oct 2023 05:20:11 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:10 GMT
File Name: rdtsc.html
5. library.tamu.edu/about/loan_evans.html
Expires: Mon, 30 Oct 2023 04:22:15 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:15 GMT
File Name: loan_evans.html
6. man7.org/linux/man-pages/man3/strtime.3.html
Expires: Mon, 30 Oct 2023 04:22:21 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:21 GMT
File Name: strtime.3.html
7. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Tue, 31 Oct 2023 04:20:27 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:27 GMT
File Name: deep-learning-with-MATLAB.html
8. www.conference-service.com/conferences/networks.html
Expires: Mon, 30 Oct 2023 04:22:34 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:34 GMT
File Name: networks.html
9. tools.ietf.org/html/rfc194
Expires: Mon, 30 Oct 2023 05:20:39 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:39 GMT
File Name: rfc194
=====END LIST=====
```

<server after 11th request>

```
-----CACHE LIST-----
0. www.tamu.edu/index.html
Expires: Mon, 30 Oct 2023 04:22:55 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:55 GMT
File Name: index.html
1. www.evanjones.ca/crc32c.html
Expires: Mon, 30 Oct 2023 04:21:55 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:19:55 GMT
File Name: crc32c.html
2. www.codeincodeblock.com/2011/06/mini-project-snake-game-in-c.html
Expires: Mon, 30 Oct 2023 04:20:01 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:00 GMT
File Name: mini-project-snake-game-in-c.html
3. www.cs.cornell.edu/~tomf/notes/cps104/twoscomp.html
Expires: Mon, 30 Oct 2023 04:22:05 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:05 GMT
File Name: twoscomp.html
4. www.mcs.anl.gov/~kazutomo/rdtsc.html
Expires: Mon, 30 Oct 2023 05:20:11 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:10 GMT
File Name: rdtsc.html
5. library.tamu.edu/about/loan_evans.html
Expires: Mon, 30 Oct 2023 04:22:15 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:15 GMT
File Name: loan_evans.html
6. man7.org/linux/man-pages/man3/strtime.3.html
Expires: Mon, 30 Oct 2023 04:22:21 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:21 GMT
File Name: strtime.3.html
7. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Tue, 31 Oct 2023 04:20:27 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:27 GMT
File Name: deep-learning-with-MATLAB.html
8. www.conference-service.com/conferences/networks.html
Expires: Mon, 30 Oct 2023 04:22:34 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:34 GMT
File Name: networks.html
9. tools.ietf.org/html/rfc194
Expires: Mon, 30 Oct 2023 05:20:39 GMT
Modified Time Stamp: Mon, 30 Oct 2023 04:20:39 GMT
File Name: rfc194
=====END LIST=====
```

→ If we compare the table before and after the 11th request, we can see that the least recently used entry gets replaced.

(4) a stale Expires header in the cache is accessed, the cache entry is replaced with a fresh copy, and the fresh data is delivered to the requester;
<Cache list before requesting the stale cache entry>

```
=====CACHE LIST=====
0. tools.ietf.org/html/rfc1945
Expires: Thu, 02 Nov 2023 01:42:14 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:42:14 GMT
File Name: rfc1945
1. www.conference-service.com/conferences/networks.html
Expires: Thu, 02 Nov 2023 00:45:27 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:21 GMT
File Name: networks.html
2. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Fri, 03 Nov 2023 00:43:18 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:29 GMT
File Name: deep-learning-with-MATLAB.html
3. man7.org/linux/man-pages/man3/strtfime.3.html
Expires: Thu, 02 Nov 2023 00:45:38 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:38 GMT
File Name: strtfime.3.html
```

<Requesting stale cache entry to the actual server>

```
Message sent from Client:
GET /linux/man-pages/man3/strtfime.3.html HTTP/1.0
Host:man7.org
```

```
Cache hit, but file expired.
Requesting file from the remote server.
Sending HTTP query to web server
GET /linux/man-pages/man3/strtfime.3.html HTTP/1.0
Host:man7.org
If-Modified-Since: Thu, 02 Nov 2023 00:43:38 GMT
```

```
Printing HTTP response
HTTP/1.1 301 Moved Permanently
Date: Thu, 02 Nov 2023 00:50:33 GMT
Server: Apache/2.4.41 (Ubuntu)
Location: https://man7.org/linux/man-pages/man3/strtfime.3.html
Content-Length: 335
Connection: close
Content-Type: text/html; charset=iso-8859-1
```

```
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
<html><head>
<title>301 Moved Permanently</title>
</head><body>
<h1>Moved Permanently</h1>
<p>The document has moved <a href="https://man7.org/linux/man-pages/man3/strtfime.3.html">here</a>.</p>
<hr>
<address>Apache/2.4.41 (Ubuntu) Server at man7.org Port 80</address>
</body></html>
```

<Replaced cache entry>

```
=====CACHE LIST=====
0. tools.ietf.org/html/rfc1945
Expires: Thu, 02 Nov 2023 01:42:14 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:42:14 GMT
File Name: rfc1945
1. www.conference-service.com/conferences/networks.html
Expires: Thu, 02 Nov 2023 00:45:27 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:21 GMT
File Name: networks.html
2. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Fri, 03 Nov 2023 00:43:18 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:29 GMT
File Name: deep-learning-with-MATLAB.html
3. man7.org/linux/man-pages/man3/strtfime.3.html
Expires: Thu, 02 Nov 2023 00:50:33 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:38 GMT
File Name: strtfime.3.html
4. www.math.edu/digital/www/digital.html
```


(5) a stale entry in the cache without an Expires header is determined based on the last Web server access time and last modification time, the stale cache entry is replaced with fresh data, and the fresh data is delivered to the requester;

<server before requesting stale cache entry>

```
=====CACHE LIST=====
0. tools.ietf.org/html/rfc1945
Expires: Thu, 02 Nov 2023 01:42:14 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:42:14 GMT
File Name: rfc1945
1. www.conference-service.com/conferences/networks.html
Expires: Thu, 02 Nov 2023 00:45:27 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:21 GMT
File Name: networks.html
2. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Fri, 03 Nov 2023 00:43:18 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:29 GMT
File Name: deep-learning-with-MATLAB.html
3. man7.org/linux/man-pages/man3/strtime.3.html
Expires: Thu, 02 Nov 2023 00:45:38 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:38 GMT
File Name: strtime.3.html
4. web.mit.edu/dimitrib/www/datanets.html
Expires: Thu, 02 Nov 2023 00:46:02 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:44:02 GMT
File Name: datanets.html
```

<requesting with If-Modified-Since> (Bonus Feature)

```
=====END LIST=====
Message sent from Client:
GET /dimitrib/www/datanets.html HTTP/1.0
Host:web.mit.edu

Cache hit, but file expired.
Requesting file from the remote server.
Sending HTTP query to web server
GET /dimitrib/www/datanets.html HTTP/1.0
Host:web.mit.edu
If-Modified-Since: Thu, 02 Nov 2023 00:44:02 GMT

Printing HTTP response
HTTP/1.0 304 Not Modified
Server: Apache
X-Cnection: close
ETag: "470213e4-872-61581a25"
Date: Thu, 02 Nov 2023 00:46:08 GMT
Connection: close
Content-Security-Policy: frame-ancestors 'self' https://web.mit.edu https://www.mit.edu http://web.mit.edu http://www.mit.edu
X-Frame-Options: SAMEORIGIN

File is still up to date. Sending file in cache.
```

<After replacing the cache entry>

```
=====CACHE LIST=====
0. tools.ietf.org/html/rfc1945
Expires: Thu, 02 Nov 2023 01:42:14 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:42:14 GMT
File Name: rfc1945
1. www.conference-service.com/conferences/networks.html
Expires: Thu, 02 Nov 2023 00:45:27 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:21 GMT
File Name: networks.html
2. www.mathworks.com/videos/series/deep-learning-with-MATLAB.html
Expires: Fri, 03 Nov 2023 00:43:18 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:29 GMT
File Name: deep-learning-with-MATLAB.html
3. man7.org/linux/man-pages/man3/strtime.3.html
Expires: Thu, 02 Nov 2023 00:45:38 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:43:38 GMT
File Name: strtime.3.html
4. web.mit.edu/dimitrib/www/datanets.html
Expires: Thu, 02 Nov 2023 00:46:08 GMT
Modified Time Stamp: Thu, 02 Nov 2023 00:44:02 GMT
File Name: datanets.html
5. www.mca.com/.../.../.../.../...
```

→ Since the proxy server got the “304 Not Modified” response, the cache entry doesn’t get updated.

(6) a cache entry without an Expires header that has been previously accessed from the Web server in the last 24 hours and was last modified more than one month ago is returned to the requester;

<Server side>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (20:41:48 11/01/23)
:~ ./server 127.0.0.1 8000
Server socket is created.
Listen successful.
Waiting...
Message sent from Client:
GET /index.html HTTP/1.0
Host:www.tamu.edu

Cache missed.
Passing HTTP request to the web server
GET /index.html HTTP/1.0
Host: www.tamu.edu

Request passed to the web server.
Recieved response from the web server.
Passed the file to the client.
Sent file to the client
*****
=====CACHE LIST=====
0. www.tamu.edu/index.html
Expires: Thu, 02 Nov 2023 01:44:25 GMT
Modified Time Stamp: Thu, 02 Nov 2023 01:42:25 GMT
File Name: index.html
=====END LIST=====
Message sent from Client:
GET /index.html HTTP/1.0
Host:www.tamu.edu

File found in cache.
Sending file to the client...
File sent to the client.
=====CACHE LIST=====
0. www.tamu.edu/index.html
Expires: Thu, 02 Nov 2023 01:44:25 GMT
Modified Time Stamp: Thu, 02 Nov 2023 01:42:33 GMT
File Name: index.html
=====END LIST=====
```

<Client side>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4/clients> (20:42:20 11/01/23)
:~ ./client 127.0.0.1 8000 www.tamu.edu/index.html

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4/clients> (20:42:25 11/01/23)
:~ cat index.html
<html>
<head><title>301 Moved Permanently</title></head>
<body>
<center><h1>301 Moved Permanently</h1></center>
<hr><center>CloudFront</center>
</body>
</html>

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4/clients> (20:42:31 11/01/23)
:~ ./client 127.0.0.1 8000 www.tamu.edu/index.html

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4/clients> (20:42:33 11/01/23)
:~ cat index.html
<html>
<head><title>301 Moved Permanently</title></head>
<body>
<center><h1>301 Moved Permanently</h1></center>
<hr><center>CloudFront</center>
</body>
</html>
```

→ Here, we can see that the cached entry without the expires header gets retrieved from the proxy server successfully.

(7) three clients can simultaneously access the proxy server and get the correct data (you will need to access large documents to show this), and
<clients 1,2,3>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:07:32 10/30/23)
:: ./client 127.0.0.1 8000 demo.borland.com/testsite/stadyn_largepagewithimages.html
[Mon Oct 30 00:00:41 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:08:41 10/30/23)
:: █

cache_file.h  client.o  deep-learning-with-MATLAB.html  mini-project-snake-game-in-c.html
cache_file.o  common.h  index.html                      mp4_readme.md
client        crc32c.html loan_evans.html                 networks.html

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:03:29 10/30/23)
:: ./client 127.0.0.1 8000 www.cs.cornell.edu/~tomf/notes/cps104/twoscomp.html
[Mon Oct 30 00:04:25 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:04:25 10/30/23)
:: ./client 127.0.0.1 8000 https://demo.borland.com/testsite/stadyn_largepagewithimages.html
connect: Connection refused

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:07:31 10/30/23)
:: ./client 127.0.0.1 8000 demo.borland.com/testsite/stadyn_largepagewithimages.html
[Mon Oct 30 00:00:07 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:08:39 10/30/23)
::

Location: https://www.evanjones.ca/crc32c.html
X-Cloud-Trace-Context: 3cad5bf383b3bb48b1ac8789ec20ae99
Date: Mon, 30 Oct 2023 04:19:55 GMT
Content-Type: text/html
Server: Google Frontend
Content-Length: 0

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:30:20 10/29/23)
:: cat rfc194
HTTP/1.1 301 Moved Permanently
Date: Mon, 30 Oct 2023 04:20:39 GMT
Connection: close
Cache-Control: max-age=3600
Expires: Mon, 30 Oct 2023 05:20:39 GMT
Location: https://datatracker.ietf.org/doc/html/rfc194
Server: cloudflare
CF-RAY: 81e0ddf03c5e46ce-DFW
alt-svc: h3=":443"; ma=86400

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (23:30:27 10/29/23)
:: ./client 127.0.0.1 8000 www.cs.cornell.edu/~tomf/notes/cps104/twoscomp.html
[Mon Oct 30 00:04:25 2023] Request sent. Waiting for response...
[Mon Oct 30 00:04:25 2023] Received 200 OK. Content not modified.

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:04:25 10/30/23)
:: ./client 127.0.0.1 8000 https://demo.borland.com/testsite/stadyn_largepagewithimages.html
[Mon Oct 30 00:07:30 2023] Request sent. Waiting for response...

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:07:30 10/30/23)
:: ./client 127.0.0.1 8000 demo.borland.com/testsite/stadyn_largepagewithimages.html
[Mon Oct 30 00:08:37 2023] Request sent. Waiting for response...
[Mon Oct 30 00:08:38 2023] Received 200 OK. Content not modified.

[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:08:38 10/30/23)
::
```


<server>

```
[kdu1113]@hera3 ~/ECEN602_Network/ECEN602_Team07/MP4> (00:08:2
:: ./server 127.0.0.1 8000
Server socket is created.
Listen successful.
Waiting...
Message sent from Client:
GET /testsite/stadyn_largepagewithimages.html HTTP/1.0
Host:demo.borland.com

Cache missed.
Passing HTTP request to the web server
GET /testsite/stadyn_largepagewithimages.html HTTP/1.0
Host: demo.borland.com

Request passed to the web server.
Recieved response from the web server.
Passed the file to the client.
Sent file to the client
*****
=====CACHE LIST=====
0. demo.borland.com/testsite/stadyn_largepagewithimages.html
Expires: Mon, 30 Oct 2023 05:10:37 GMT
Modified Time Stamp: Mon, 30 Oct 2023 05:08:37 GMT
File Name: stadyn_largepagewithimages.html
=====END LIST=====
Message sent from Client:
GET /testsite/stadyn_largepagewithimages.html HTTP/1.0
Host:demo.borland.com

File found in cache.
Sending file to the client...
File sent to the client.
=====CACHE LIST=====
0. demo.borland.com/testsite/stadyn_largepagewithimages.html
Expires: Mon, 30 Oct 2023 05:10:37 GMT
Modified Time Stamp: Mon, 30 Oct 2023 05:08:39 GMT
File Name: stadyn_largepagewithimages.html
=====END LIST=====
Message sent from Client:
GET /testsite/stadyn_largepagewithimages.html HTTP/1.0
Host:demo.borland.com

File found in cache.
Sending file to the client...
File sent to the client.
=====CACHE LIST=====
0. demo.borland.com/testsite/stadyn_largepagewithimages.html
Expires: Mon, 30 Oct 2023 05:10:37 GMT
Modified Time Stamp: Mon, 30 Oct 2023 05:08:41 GMT
File Name: stadyn_largepagewithimages.html
=====END LIST=====
```