

CLAIMS

1. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:
 - (a) the second device sending the second identifier to the first server;
 - (b) in response to receiving the second identifier, the first server storing the second identifier;
 - (c) the first device sending a first request to the first server;
 - (d) in response to receiving the first request, the first server sending the second identifier to the first device;
 - (e) the first device sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier;
 - (f) in response to receiving the second request, the second device sending the first content identifier to the second server using the third identifier;
 - (g) in response to receiving the first content identifier, the second server sending the first content to the second device; and
 - (h) in response to receiving the first content, the second device sending the first content to the first device.
2. The method according to claim 1 further comprising the steps of:
 - (i) the first device sending the first content identifier to the second server using the third identifier; and
 - (j) in response to receiving the first content identifier, the second server sending the first content to the first device.
3. The method according to claim 2 wherein steps (i) and (j) are preceding step (e).
4. The method according to claim 2 wherein steps (i) and (j) are following step (h).
5. The method according to claim 2 wherein steps (i) and (j) are simultaneously with one of the steps (e) - (h) using multitasking or multiprocessing.

6. The method according to claim 1 for use with a third device identified in the Internet by a fourth identifier, further comprising the steps of:

- (i) the third device sending the fourth identifier to the first server;
- (j) in response to receiving the fourth identifier, the first server storing the fourth identifier;
- (k) in response to receiving the first request, the first server sending the fourth identifier to the first device;
- (l) the first device sending a third request to the third device using the fourth identifier, the third request includes the first content identifier and the third identifier;
- (m) in response to receiving the third request, the third device sending the first content identifier to the second server using the third identifier;
- (n) in response to receiving the first content identifier, the second server sending the first content to the third device; and
- (o) in response to receiving the first content, the third device sending the first content to the first device.

7. The method according to claim 6 wherein steps (i) to (o) are simultaneously with steps (e) - (h) using multitasking or multiprocessing.

8. The method according to claim 1 for use with a group consisting of a plurality of devices, each associated with a respective identifier for being identified in the Internet, for each of the devices in the group the method further comprising the steps of:

- (i) the group device sending the associated identifier to the first server; and
- (j) in response to receiving the associated identifier, the first server storing the associated identifier.

9. The method according to claim 8 further comprising the step of:

- (a) in response to receiving the first request, the first server sending the identifiers of all the devices in the group to the first device.

10. The method according to claim 8 for each of the group devices in the group further comprising the steps of:

- (p) the first device sending a third request to the group device using the device associated identifier, the third request includes the first content identifier and the third identifier;

- (q) in response to receiving the third request, the group device sending the first content identifier to the second server using the third identifier;
- (r) in response to receiving the first content identifier, the second server sending the first content to the group device; and
- (s) in response to receiving the first content, the group device sending the first content to the first device.

11. The method according to claim 8 wherein the second device is included in the group, the method further comprising the step of selecting the second device out of the devices in the group.

12. The method according to claim 11 wherein the first server is selecting the second device out of the devices in the group, and in step (d) the first server is sending the second identifier to the first device in response to the selection.

13. The method according to claim 11 wherein in step (d) the first server sending the identifiers of all devices and the group to the first device, followed by a step of the first device selecting the second device.

14. The method according to claim 11 further comprising the step of selecting one or more devices, distinct from the second device, out of the devices in the group.

15. The method according to claim 14 further comprising the step of selecting 2, 3, 4, 5 or 6 devices, each distinct from the second device, out of the devices in the group.

16. The method according to claim 14 further comprising the step of selecting 7, 8, 9, or 9 devices, each distinct from the second device, out of the devices in the group.

17. The method according to claim 14 further comprising the step of selecting 10 or more devices, each distinct from the second device, out of the devices in the group.

18. The method according to claim 8 wherein the second device is randomly selected out of the devices in the group.

19. The method according to claim 18 wherein the second device is randomly selected using one or more random numbers generated by a random number generator.

20. The method according to claim 19 wherein the random number generator is software based.

21. The method according to claim 19 wherein the random number generator is based on executing an algorithm for generating pseudo-random numbers.

22. The method according to claim 8 wherein the second device is selected based on attributes or characteristics of the device.
23. The method according to claim 8 wherein the second device is selected based on the physical geographical location.
24. The method according to claim 23 further comprising for each of the devices in the group the steps of sending the device physical geographical location to the first server, followed by the step of the first server storing the received group device physical geographical location.
25. The method according to claim 23 wherein the physical geographical location includes at least one out of a continent, a country, a state or province, a city, a street, a ZIP code, or longitude and latitude
26. The method according to claim 8 wherein the second device is selected based on the physical geographical proximity to the second server.
27. The method according to claim 8 wherein the second device is selected based on the second identifier.
28. The method according to claim 27 wherein the second identifier is an IP address, and the second device is selected based on its IP address.
29. The method according to claim 28 wherein the second device is selected based on comparing the second identifier to the third identifier.
30. The method according to claim 8 wherein the second device is selected based on past activities.
31. The method according to claim 8 wherein the second device is selected based on the timing of an event.
32. The method according to claim 31 wherein the event is the last communication between the second device and the first device.
33. The method according to claim 31 wherein the event is the last communication between the second device and the first server.
34. The method according to claim 31 wherein the event is the last communication between the second device and the second server.
35. The method according to claim 1 for fetching over the Internet a second content, identified by a second content identifier, by a third device, identified in the Internet by a fourth identifier, from a

third server identified in the Internet by a fifth identifier, via the first device, the method further comprising the steps of:

- (i) the third device sending a third request to the first server;
- (k) in response to receiving the third request, the first server sending the first identifier to the third device;
- (l) the third device sending a fourth request to the first device using the first identifier, the fourth request includes the second content identifier and the fifth identifier;
- (m) in response to receiving the fourth request, the first device sending the second content identifier to the third server using the fifth identifier;
- (n) in response to receiving the second content identifier, the third server sending the second content to the first device; and
- (o) in response to receiving the second content, the first device sending the second content to the third device.

36. The method according to claim 35 wherein the third server is distinct from the second server.

37. The method according to claim 35 wherein the third server and the second server are the same server.

38. The method according to claim 35 wherein the third device is distinct from the second device.

39. The method according to claim 35 wherein the third device and the second device are the same.

40. The method according to claim 35 wherein the second content is distinct from the first content.

41. The method according to claim 35 wherein the second content and the first content are the same content.

42. The method according to claim 35 wherein the steps (i) – (o) are executed concurrently with steps (c) - (h) using multitasking or multiprocessing.

43. The method according to claim 1 wherein the steps are sequentially executed.

44. The method according to claim 1 wherein each of the identifiers is an IP address or a URL.

45. The method according to claim 44 wherein each of the IP addresses is in IPv4 or IPv6 form.

46. The method according to claim 1 wherein at least one of the servers is a web server using HyperText Transfer Protocol (HTTP) that responds to HTTP requests via the Internet.

47. The method according to claim 46 wherein the first and second requests are HTTP requests.

48. The method according to claim 46 wherein the communication with the second server is based on, or using, HTTP persistent connection.

49. The method according to claim 1 wherein the communication with the first device, the second device, the first server, or the second server, is based on, or according to, TCP/IP protocol or connection.

50. The method according to claim 1 wherein the step (e) is preceded by the step of establishing a connection between the first device and the second device in response to receiving the second identifier.

51. The method according to claim 50 wherein the first device is communicating with the second device over the established connection.

52. The method according to claim 50 wherein the step (e) the first device is sending the second request over the established connection.

53. The method according to claim 50 wherein the first device is communicating with the second device using TCP, and wherein the connection is established by performing 'Active OPEN' or 'Passive OPEN'.

54. The method according to claim 50 wherein the first device is communicating with the second device using a VPN.

55. The method according to claim 50 wherein the established connection is using a tunneling protocol.

56. The method according to claim 50 wherein the connection is established using authentication.

57. The method according to claim 1 further followed by the steps of the first device receiving the first content from the second device; and the first device storing the first content in a memory.

58. The method according to claim 1 wherein the first content includes, consists of, or comprises, a part or whole of files, text, numbers, audio, voice, multimedia, video, images, music, or computer program.

59. The method according to claim 58 wherein the first content includes, consists of, or comprises, a part of, or a whole of, a web-site page.

60. The method according to claim 1 wherein at least the first server or the second server is storing, operating, or using, a server operating system.

61. The method according to claim 60 wherein the server operating system consists or, comprises of, or based on, one out of Microsoft Windows Server®, Linux, or UNIX.
62. The method according to claim 60 wherein the server operating system consists or, comprises of, or based on, one out of Microsoft Windows Server® 2003 R2, 2008, 2008 R2, 2012, or 2012 R2 variant, Linux™ or GNU/Linux based Debian GNU/Linux, Debian GNU/kFreeBSD, Debian GNU/Hurd, Fedora™, Gentoo™, Linspire™, Mandriva, Red Hat® Linux, SuSE, and Ubuntu®, UNIX® variant Solaris™, AIX®, Mac™ OS X, FreeBSD®, OpenBSD, and NetBSD®.
63. The method according to claim 1 wherein the first device or the second device is storing, operating, or using, a client operating system.
64. The method according to claim 63 wherein the client operating system consists or, comprises of, or is based on, one out of Microsoft Windows 7, Microsoft Windows XP, Microsoft Windows 8, Microsoft Windows 8.1, Linux, and Google Chrome OS.
65. The method according to claim 63 wherein the client operating system is a mobile operating system.
66. The method according to claim 65 wherein the mobile operating system is one out of Android version 2.2 (Froyo), Android version 2.3 (Gingerbread), Android version 4.0 (Ice Cream Sandwich), Android Version 4.2 (Jelly Bean), Android version 4.4 (KitKat)), Apple iOS version 3, Apple iOS version 4, Apple iOS version 5, Apple iOS version 6, Apple iOS version 7, Microsoft Windows® Phone version 7, Microsoft Windows® Phone version 8, Microsoft Windows® Phone version 9, and Blackberry® operating system.
67. The method according to claim 1 further preceded by the step of intercepting a request for the first content in the first device.
68. The method according to claim 67 wherein the request is initiated in an application in the first device.
69. The method according to claim 68 wherein the interception is in the form of a plug-in or an extension of the application.
70. The method according to claim 68 wherein the application is a communication application.
71. The method according to claim 70 wherein the communication application is a TCP/IP or HTTP handling application.
72. The method according to claim 68 wherein the interception is by hooking to the application.
73. The method according to claim 68 wherein the interception is in a filter driver form.

74. The method according to claim 68 wherein the application and the steps are communicating using an Inter-Process Communication (IPC).
75. The method according to claim 74 wherein the IPC is using a file sharing, a signal, a socket, a pipe, a message queue, a shared memory, a semaphore, or memory mapped file.
76. The method according to claim 74 wherein the IPC is using a clipboard, a Component Object Model (COM), a data copy, a DDE protocol, or mailslots.
77. The method according to claim 68 wherein the application is a web browser.
78. The method according to claim 77 wherein the web browser consists of, comprises of, or based on, Microsoft Internet Explorer, Google Chrome, Opera™, or Mozilla Firefox®.
79. The method according to claim 68 wherein the web browser is a mobile web browser.
80. The method according to claim 79 wherein the mobile web browser consists of, comprises of, or based on, Safari, Opera Mini™, or Android web browser.
81. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:
- (a) sending the first identifier to the first server;
 - (b) sending a first request to the first server;
 - (c) receiving the second identifier from the first server;
 - (d) sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier; and
 - (e) receiving the first content from the second device.
82. The method according to claim 81 further comprising the step of:
- (f) sending the first content identifier to the second server using the third identifier.
83. The method according to claim 82 wherein step (f) is preceding step (d).
84. The method according to claim 82 wherein step (f) is following step (e).
85. The method according to claim 82 wherein step (f) is simultaneous with steps (d) - (e).
86. The method according to claim 85 wherein step (f) is simultaneous with steps (d) - (e) using multitasking or multiprocessing.

87. The method according to claim 81 for use with a third device identified in the Internet by a fourth identifier, further comprising the steps of:

- (f) receiving the fourth identifier from the first server;
- (g) sending a third request to the third device using the fourth identifier, the third request includes the first content identifier and the third identifier; and
- (h) receiving the first content from the third device.

88. The method according to claim 87 wherein steps (f) to (h) are executed concurrently with steps (d) - (c) using multitasking or multiprocessing.

89. The method according to claim 81 for use with a group consisting of a plurality of devices, each device in the group is associated with a respective identifier for being identified in the Internet, further comprising the steps of:

- (f) receiving the identifiers of the group devices from the first server;
- (g) sending a third request to the group device using their associated identifiers, the third request includes the first content identifier and the third identifier; and
- (h) receiving the first content from the group devices.

90. The method according to claim 89 wherein steps (f) to (h) are executed concurrently with steps (d) - (c).

91. The method according to claim 89 wherein steps (f) to (h) are executed concurrently with steps (d) - (c) using multitasking or multiprocessing.

92. The method according to claim 89 wherein the second device is included in the group, the method further comprising the step of selecting the second device out of the devices in the group.

93. The method according to claim 89 further comprising the step of selecting one or more devices, distinct from the second device, out of the devices in the group.

94. The method according to claim 89 wherein the second device is randomly selected out of the devices in the group.

95. The method according to claim 89 wherein the second device is selected based on attributes or characteristics of the device.

96. The method according to claim 89 wherein the second device is selected based on the physical geographical location.

97. The method according to claim 89 wherein the second device is selected based on the physical geographical proximity to the second server.

98. The method according to claim 89 wherein the second device is selected based on the second identifier.

99. The method according to claim 89 wherein the second device is selected based on past activities.

100. The method according to claim 89 wherein the second device is selected based on the timing of an event.

101. The method according to claim 81 for fetching over the Internet a second content, identified by a second content identifier, by a third device, identified in the Internet by a fourth identifier, from a third server identified in the Internet by a fifth identifier, via the first device, the method further comprising the steps of:

- (f) receiving a third request from the third device, the third request includes the second content identifier and the fifth identifier;
- (g) in response to receiving the third request, sending the second content identifier to the third server using the fifth identifier;
- (h) receiving the second content from the third server; and
- (i) in response to receiving the second content, sending the second content to the third device using the fourth identifier.

102. The method according to claim 101 wherein the third server is distinct from the second server.

103. The method according to claim 101 wherein the third server and the second server are the same server.

104. The method according to claim 101 wherein the second content is distinct from the first content.

105. The method according to claim 101 wherein the second content and the first content are the same content.

106. The method according to claim 101 wherein the steps (f) – (i) are executed after steps (a) - (e).

107. The method according to claim 101 wherein the steps (f) – (i) are executed concurrently with steps (a) - (e) using multitasking or multiprocessing.

108. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:

- (a) sending the second identifier to the first server;
- (b) receiving a second request from the first device, the second request includes the first content identifier and the third identifier;
- (c) in response to receiving the second request, sending the first content identifier to the second server using the third identifier;
- (d) receiving the first content from the second server; and
- (e) in response to receiving the first content, sending the first content to the first device using the first identifier.

109. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:

- (a) receiving the second identifier from the second device;
- (b) in response to receiving the second identifier, storing the second identifier;
- (c) receiving a first request from the first device; and
- (d) in response to receiving a first request, sending the second identifier to the first device.

110. The method according to claim 109 for use with a third device identified in the Internet by a fourth identifier, further comprising the steps of:

- (e) receiving the fourth identifier from the third device;
- (f) in response to receiving the fourth identifier, storing the fourth identifier; and
- (g) in response to receiving the first request, sending the fourth identifier to the first device.

111. The method according to claim 109 for use with a group consisting of a plurality of devices, each device in the group is associated with a respective identifier for being identified in the Internet, for each of the group devices in the group the method further comprising the steps of:

- (h) receiving the associated identifier from the group device;
- (i) in response to receiving the associated identifier, storing the associated identifier; and

(j) in response to receiving the first request, sending the identifier of all group devices to the first device.

112. The method according to claim 111 wherein the second device is included in the group, the method further comprising the step of selecting the second device out of the devices in the group, and wherein in step (d) the sending the second identifier to the first device is in response to the selection.

113. The method according to claim 112 wherein the second device is randomly selected out of the devices in the group.

114. The method according to claim 112 wherein the second device is selected based on attributes or characteristics of the device.

115. The method according to claim 112 wherein the second device is selected based on the physical geographical location.

116. The method according to claim 112 wherein the second device is selected based on the second identifier.

117. The method according to claim 112 wherein the second device is selected based on past activities.

118. The method according to claim 117 wherein the second device is selected based on the timing of an event.

119. The method according to claim 118 wherein the event is the last communication between the second device.

120. A method for fetching a content over the Internet by a first device identified in the Internet by a first identifier, from a first server identified in the Internet by a second identifier, via a group of multiple devices, each identified in the Internet by an associated group device identifier, wherein the content is partitioned into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier,

and for each of the content slices, comprising the steps of:

(a) selecting a device from the group;

(b) the first device sending a first request to the selected device using the selected device identifier, the first request including the content slice identifier and the second identifier;

- (c) in response to receiving the first request, the selected device sending a second request to the first server using the second identifier, the second request including the content slice identifier;
- (d) in response to receiving the second request, the first server sending the content slice to the selected device; and
- (e) in response to receiving the content slice, the selected device sending the content slice to the first device.

121. The method according to claim 120 wherein the content is composed of bits, nibbles, bytes, characters, words, or strings, and the partitioning is based on bit, nibble, byte, multi-byte, number, character, word, or string level.

122. The method according to claim 120 wherein the content is composed of files, or programs, and the partitioning is based on file or program level.

123. The method according to claim 120 wherein the content is a website content comprising multiple webpages, and the partitioning is based webpages level.

124. The method according to claim 120 wherein the all parts of the content are included in all of the content slices.

125. The method according to claim 120 wherein all of the content slices are having the same size.

126. The method according to claim 120 wherein at least two content slices are the same.

127. The method according to claim 120 wherein part of the content is included in two or more content slices.

128. The method according to claim 120 wherein the partitioning is sequential in the content.

129. The method according to claim 120 wherein the partitioning is non-sequential in the content.

130. The method according to claim 120 wherein the number of content slices is equal to the number of devices in the group.

131. The method according to claim 130 wherein a distinct device is selected for each content slice.

132. The method according to claim 120 wherein the number of content slices is higher than the number of devices in the group.

133. The method according to claim 120 wherein the number of content slices is lower than the number of devices in the group.

134. A method for fetching a content over the Internet from a first server identified in the Internet by a second identifier via a group of multiple devices, each identified in the Internet by an associated group device identifier, the method comprising the step of partitioning the content into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier, and for each of the content slices, comprising the steps of:

- (a) selecting a device from the group;
- (b) sending a first request to the selected device using the selected device identifier, the first request including the content slice identifier and the second identifier;
- (c) receiving the content slice from the selected device; and
- (d) constructing the content from the received content slices.

135. The method according to claim 134 wherein the content is composed of bits, nibbles, bytes, characters, words, or strings, and the partitioning is based on bit, nibble, byte, multi-byte, number, character, word, or string level.

136. The method according to claim 134 wherein the content is composed of files, or programs, and the partitioning is based on file or program level.

137. The method according to claim 136 wherein the content is a website content comprising multiple webpages, and the partitioning is based webpages level.

138. The method according to claim 134 wherein the all parts of the content are included in all of the content slices.

139. The method according to claim 134 wherein all of the content slices are having the same size.

140. The method according to claim 134 wherein at least two content slices are the same.

141. The method according to claim 134 wherein part of the content is included in two or more content slices.

142. The method according to claim 134 wherein the partitioning is sequential in the content.

143. The method according to claim 134 wherein the partitioning is non-sequential in the content.

144. The method according to claim 134 wherein the number of content slices is equal to the number of devices in the group.

145. The method according to claim 144 wherein a distinct device is selected for each content slice.

146. The method according to claim 134 wherein the number of content slices is higher than the number of devices in the group.

147. The method according to claim 134 wherein the number of content slices is lower than the number of devices in the group.