

CLAIMS

1. A method for playing on a player of a client device (11) a content streamed in a network (1), said content consisting of a sequence of segments available in a plurality of quality levels, the player being configured so as to choose the quality level of the segments as a function of at least one parameter representative of a segment reception rate, according to an Adaptive BitRate, ABR, logic of the player; the client device (11) comprising a first buffer (M1) for storing segments in a format adapted for transferring within the network (1), the method being characterized in that it comprises performing by a processing unit (110) of the client device (11):

(a) receiving from the player a request for a current segment at a first quality level;

(b) determining that the player will request according to its ABR logic a next segment at a second quality level after said requested current segment is provided from the first buffer memory (M1), using a model predicting the ABR logic of the player;

(c) if said next segment is not present at said second quality level in the first buffer memory (M1), fetching said next segment at said second quality level from the network (1).

2. A method according to claim 1, wherein step (b) comprises predicting said second quality level with the model predicting the ABR logic of the player, as a function of said at least one parameter representative of a segment reception rate.

3. A method according to any of claims 1 and 2, wherein said second quality level is predefined, step (b) comprising estimating an optimal response delay such that providing the requested current segment at the expiration of said optimal response delay will cause the player to request according to its ABR logic a next segment at said second quality level, as a function of said model predicting the ABR logic of the player.

4. A method according to any one of claims 1 to 3, wherein said model is trained from a database of training examples each associating a vector of measured parameters representative of a segment reception rate with the corresponding quality level subsequently chosen by the player according to its ABR logic.

5. A method according to any one of claims 1 to 4, wherein said ABR logic is defined by a first function of said at least one parameter representative of a segment reception rate, said model approximating the first function.

6. A method according to one of claims 1 to 5, wherein the client device (11) further comprises a second buffer (M2) for storing segments in a format adapted for being played by the player, step (c) comprising providing the requested current segment from the first buffer memory (M1) to said second buffer (M2).

7. A method according to claims 3 and 6 in combination, wherein the requested current segment is provided from the first buffer memory (M1) at the expiration of said estimated optimal response delay.

8. A method according to any one of claims 6 and 7, wherein said parameter representative of a segment reception rate is a buffer level of the second buffer (M2) and/or a bandwidth.

9. A method according to any one of claims 1 to 8, wherein step (c) comprises, if said next segment is at least partially present, preferably entirely present, at said second quality level in the first buffer memory (M1), performing again steps (b) and (c) for the second next segment.

10. A method according to any one of claims 1 to 9, wherein step (c) comprises, if said next segment is only partially present at said second quality

level in the first buffer memory (M1), fetching said next segment at said second quality level directly from a content server (2) of the network (1).

11. A method according to any one of claims 1 to 10, comprising a further step (d) of verifying that a request for the next segment at the second quality level is received from the player.

12. A device for playing on a player a content streamed in a network (1), said content consisting of a sequence of segments available in a plurality of quality levels, the player being configured so as to choose the quality level of the segments as a function of at least one parameter representative of a segment reception rate, according to an Adaptive BitRate, ABR, logic of the player; the client device (11) comprising a first buffer (M1) for storing segments in a format adapted for transferring within the network (1), the client device (11) being characterized in that it comprises a processing unit (110) implementing:

(a) receiving from the player a request for a current segment at a first quality level;

(b) determining that the player will request according to its ABR logic a next segment at a second quality level after said requested current segment is provided from the first buffer memory (M1), using a model predicting the ABR logic of the player;

(c) if said next segment is not present at said second quality level in the first buffer memory (M1), fetching said next segment at said second quality level from the network (1).

13. Computer program product comprising code instructions to execute a method according to one of claims 1 to 11 for playing on a player of a client device (11) a content streamed in a network (1), when said program is executed on a computer

14. A computer-readable medium, on which is stored a computer program product comprising code instructions for executing a method

according to any one of claims 1 to 11 for playing on a player of a client device (11) a content streamed in a network (1).