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<start list>
<list file name (optional)>
<ordered data field list 1, optional parameters>
<data field a, optional parameters; data field b, optional parameters;
... ; data field
n, optional parameters;>
[data field a compression algorithm x, optional parameters; data field
b compression algorithm y, optional parameters; ... ;data field
m compression algorithm n]
[data field b compression algorithm x, optional parameters; data field
a compression algorithm y, optional parameters; ... ;data field
m compression algorithm n]
<end list>

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In this more sophisticated embodiment the encoders are selected based upon the data fields and their specific ordering.

In yet another embodiment of the present invention the sets of ordered data fields can be assigned to sets by set name, giving the ability for nesting of sets to facilitate ease of coding.

In yet another embodiment of the present invention the optional parameters to each encoder are utilized to share parameters amongst the same or different data fields.

Although illustrative embodiments have been described herein with reference to the accompanying drawings, it is to be understood that the present invention is not limited to those precise embodiments, and that various other changes and modifications may be affected therein by one skilled in the art without departing from the scope or spirit of the invention. All such changes and modifications are intended to be included within the scope of the invention as defined by the appended claims.

What is claimed is:

1. A method comprising:
  - recognizing a data field type of a data field in a packet; selecting an encoder associated with the recognized data field type;
  - compressing the data in the data field with the selected encoder;
  - broadcasting the compressed data to a plurality of clients, wherein the compressing achieves a compression ratio of over 10:1; and
  - utilizing a decompression state machine that comprises a plurality of decompression tables to decompress the compressed data on at least one of the plurality of clients.
2. The method of claim 1, wherein the time of the compressing and broadcasting is less than the time to broadcast the data in uncompressed form.
3. The method of claim 1, wherein the time of the compressing, broadcasting, and decompressing is less than the time to broadcast the data in uncompressed form.
4. The method of claim 1, wherein the packet includes multiple messages.
5. The method of claim 1, wherein the compressed data is broadcasted as part of a financial data feed.
6. The method of claim 1, wherein the data field includes stock information.
7. The method of claim 1, wherein the data field includes options information.
8. The method of claim 1, wherein the compressing is lossless.
9. The method of claim 1, wherein the broadcasting utilizes UDP.

10. The method of claim 1, wherein the compressing is performed on a server and the compressed data is broadcast from the server.

11. A method comprising:

- 5 recognizing a data field type of a data field in a packet; selecting an encoder associated with the recognized data field type;
- compressing the data in the data field with the selected encoder; and
- 10 point-to-point transmitting the compressed data to a client, wherein the compressing utilizes a state machine and the time of the compressing and transmitting is less than the time to transmit the data in uncompressed form.

12. The method of claim 11, wherein the compressing achieves a compression ratio of over 10:1.

13. The method of claim 11, wherein the time of the compressing, transmitting, and decompressing is less than the time to broadcast the data in uncompressed form.

14. The method of claim 11, wherein the packet includes multiple messages.

15. The method of claim 11, wherein the compressed data is transmitted as part of a financial data feed.

16. The method of claim 11, wherein the data field includes stock information.

17. The method of claim 11, wherein the data field includes options information.

18. The method of claim 11, wherein the compressing is lossless.

19. The method of claim 11, wherein the transmitting utilizes UDP.

20. The method of claim 11, wherein the compressing is performed on a server and the compressed data is transmitted from the server.

21. A method comprising:

- 35 processing data of a data field of a plurality of data fields in a packet of a financial data feed by utilizing a list of the plurality of data fields and associated encoders to select an encoder associated with the data field and utilize the selected encoder on the data of the data field to provide a processed data, wherein the size of the processed data is less than the size of the data before the processing; and
- 40 broadcasting the processed data to a plurality of clients, wherein the time of the processing and broadcasting is less than the time to broadcast the data in unprocessed form.

22. The method of claim 21, wherein the processed data includes date information.

23. The method of claim 21, wherein the processed data includes sequence information.

24. The method of claim 21, wherein the processed data includes multiple messages.

25. The method of claim 21, wherein the processing is performed on a server.

26. The method of claim 21, wherein the processing is performed on a server and the processed data is broadcast from said server.

27. The method of claim 21, wherein the processed data includes stock information.

28. The method of claim 21, wherein the processed data includes options information.

29. The method of claim 21, wherein the selected encoder is a lossless encoder.

30. The method of claim 21, wherein the broadcasting utilizes UDP.