

WHAT IS CLAIMED IS:

1. A system that implements market data entitlements controls, the system comprising:
 - a memory component configured to generate, store and manage one or more tokens and one or more associated Access Tickets; and
 - a computer processor, coupled to the memory component, that executes a client application, the computer processor configured to perform the steps of:
 - identifying, via the client application, a token, wherein the token is a cryptographically signed description of entitlements, rights and obligations a requesting user has for one or more data sources, the token comprises a count of positions, a predetermined expiration and reference data;
 - generating a set of Access Tickets based on the token, wherein each Access Ticket is associated with a position, wherein the position represents a single instance of a process that accesses market data; and
 - using an Access Ticket to retrieve associated market data pursuant to a corresponding set of rights and obligations.
2. The system of claim 1, wherein the token is reduced in the count for each Access Ticket generated.
3. The system of claim 1, wherein one or more Access Tickets are renewed prior to the predetermined expiration of the token.

4. The system of claim 1, wherein the client application elects to delegate a portion of the token to one or more other applications.

5. The system of claim 4, wherein a new token is generated for the delegated portion.

6. The system of claim 1, wherein the market data is accessed from one or more external sources via a market data access layer.

7. The system of claim 1, wherein the computer processor is further configured to perform the step of:

reporting access history based on the Access Tickets.

8. The system of claim 1, wherein the computer processor is further configured to perform the step of:

offloading aggregated traffic into one or more data stores for analysis and reporting.

9. The system of claim 1, wherein the computer processor is further configured to perform the step of:

feeding aggregated traffic to a machine learning algorithm to identify one or more hotspots and changes in access patterns.

10. The system of claim 1, wherein the computer processor is further configured to perform the step of:

applying retrospective analysis to correlate administrative operations.

11. A method that implements market data entitlements controls, the method comprising the steps of:

identifying, via a client application, a token, wherein the token is a cryptographically signed description of entitlements, rights and obligations a requesting user has for one or more data sources, the token comprises a count of positions, a predetermined expiration and reference data;

generating a set of Access Tickets based on the token, wherein each Access Ticket is associated with a position, wherein the position represents a single instance of a process that accesses market data; and

using an Access Ticket to retrieve associated market data pursuant to a corresponding set of rights and obligations.

12. The method of claim 11, wherein the token is reduced in the count for each Access Ticket generated.

13. The method of claim 11, wherein one or more Access Tickets are renewed prior to the predetermined expiration of the token.

14. The method of claim 11, wherein the client application elects to delegate a portion of the token to one or more other applications.

15. The method of claim 14, wherein a new token is generated for the delegated portion.
16. The method of claim 11, wherein the market data is accessed from one or more external sources via a market data access layer.
17. The method of claim 11, further comprising the step of:
reporting access history based on the Access Tickets.
18. The method of claim 11, further comprising the step of:
offloading aggregated traffic into one or more data stores for analysis and reporting.
19. The method of claim 11, further comprising the step of:
feeding aggregated traffic to a machine learning algorithm to identify one or more hotspots and changes in access patterns.
20. The method of claim 11, further comprising the step of:
applying retrospective analysis to correlate administrative operations.