
CLAIMS

1. A data distribution system comprising a plurality of service providers connected to a server, and a plurality of client devices connected to the server,
5 wherein the server comprises a data repository that stores data instances from the service providers, and a client repository that for each client device stores a respective collection of status attributes, each collection of status attributes indicating the statuses of the data instances with respect to the respective client device.
- 10 2. The data distribution system of claim 1, wherein each status attribute is associated with a specific data instance.
3. The data distribution system of claim 2, wherein each status attribute within
15 the collection of status attributes that is associated with a first one of the client devices can take values comprising:
- a value indicating that the data instance associated with the status attribute has yet to be loaded by the first one of the client devices; and
 - a value indicating that the data instance associated with the status
20 attribute has been loaded by the first one of the client devices.
4. The data distribution system of claim 3, wherein each status attribute within the collection of status attributes that is associated with the first one of the client devices can take values further comprising:
- 25 - a value indicating that the data instance associated with the status attribute has passed a validation check carried out upon the data instance by the first one of the client devices; and
 - a value indicating that the data instance associated with the status
30 attribute has failed the validation check.
5. The data distribution system of any preceding claim, wherein the server is configured to receive the data instances from the service providers within data feeds, each data feed providing a stream of data instances.

6. The data distribution system of claim 5, wherein the data repository is configured to store the data instances by feed, by date, and by version number.
7. The data distribution system of claim 5 or 6, wherein the server is
5 configured to format the data instances received within the data feeds before storing the data instances in the data repository.
8. The data distribution system of claim 5, 6, or 7, wherein each successive data instance of a data feed is an update of preceding data instances of the data
10 feed, and wherein the data repository is configured to store both the successive data instance and the preceding data instances.
9. The data distribution system of any preceding claim, wherein the client repository provides a client API to each client device, the client API comprising the
15 collection of status attributes for the client device.
10. The data distribution system of claim 9 when appended to any one of claims 5 - 8, wherein the client API specifies which data feeds are relevant to the client device, and therefore for which data instances in the data repository the
20 client API should store status attributes.
11. The data distribution system of claim 9 or 10, wherein the client API provides a LIST FEEDS function, which the client device can initiate to receive a list of the data feeds available to the client device.
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12. The data distribution system of claim 9, 10, or 11, wherein the client API provides at least one of:
- a LIST UPDATES function, which the client device can initiate to receive a list of updated data instances for the client device, the list based upon the values
30 of the status attributes for the client device;
 - a FETCH DATA function, which the client device can initiate to receive the latest data instance of a data feed specified by the client device; and

- a LIST HISTORY function, which the client device can initiate to receive a list of data instances for a date specified by the client device, the list based upon the values of the status attributes for the client device.

- 5 13. The data distribution system of claim 12, wherein the client API allows specification of a mode parameter in connection with the LIST UPDATES, FETCH DATA, or LIST HISTORY functions, the mode parameter indicating that the client wishes to receive data instances or a list of data instances having status attribute value(s) corresponding to the mode parameter.
- 10 14. The data distribution system of any one of claims 9 - 13, wherein the client API provides a PUT function, which the client device can initiate to set the value of the status attribute for a particular data instance.
- 15 15. A data distribution method for distributing data from a plurality of service providers to a plurality of client devices, comprising:
- receiving data instances from the service providers;
 - storing, in a data repository, the data instances; and
 - storing, in a client repository, status attributes associated with the data
- 20 instances,
- wherein the client repository stores for each client device a respective collection of status attributes, each collection of status attributes indicating the statuses of the data instances with respect to the respective client device.

CLAIMS

1. A data distribution system comprising a plurality of service providers connected to a server, and a plurality of client devices connected to the server, wherein the server comprises a data repository that stores data instances , and a client repository, wherein:

the client repository stores for each client device a respective collection of status attributes, each collection of status attributes indicating the statuses of the data instances with respect to the respective client device;

the server is configured to receive the data instances from the service providers within data feeds, each data feed providing a stream of data instances; and

the server is configured to create a new status attribute within the collection of status attributes that is associated with a first one of the client devices for each newly received data instance, the new status attribute taking a value indicating that the newly received data instance has yet to be loaded by the first one of the client devices.

2. The data distribution system of claim 1, wherein each status attribute within the collection of status attributes that is associated with the first one of the client devices can take a value indicating that the data instance associated with the status attribute has been loaded by the first one of the client devices.

3. The data distribution system of claim 2, wherein each status attribute within the collection of status attributes that is associated with the first one of the client devices can take values further comprising:

- a value indicating that the data instance associated with the status attribute has passed a validation check carried out upon the data instance by the first one of the client devices; and
- a value indicating that the data instance associated with the status attribute has failed the validation check.

4. The data distribution system of any preceding claim, wherein the data repository is configured to store the data instances by feed, by date, and by version number.
5. The data distribution system of any preceding claim, wherein the server is configured to format the data instances received within the data feeds before storing the data instances in the data repository.
6. The data distribution system of any preceding claim, wherein each successive data instance of a data feed is an update of preceding data instances of the data feed, and wherein the data repository is configured to store both the successive data instance and the preceding data instances.
7. The data distribution system of any preceding claim, wherein the client repository provides a client API to each client device, the client API comprising the collection of status attributes for the client device.
8. The data distribution system of claim 7, wherein the client API specifies which data feeds are relevant to the client device, and therefore for which data instances in the data repository the client API should store status attributes.
9. The data distribution system of claim 7 or 8, wherein the client API provides a LIST FEEDS function, which the client device can initiate to receive a list of the data feeds available to the client device.
10. The data distribution system of claim 7, 8, or 9, wherein the client API provides at least one of:
 - a LIST UPDATES function, which the client device can initiate to receive a list of updated data instances for the client device, the list based upon the values of the status attributes for the client device;

- a FETCH DATA function, which the client device can initiate to receive the latest data instance of a data feed specified by the client device; and

- a LIST HISTORY function, which the client device can initiate to receive a list of data instances for a date specified by the client device, the list based upon the values of the status attributes for the client device.

11. The data distribution system of claim 10, wherein the client API allows specification of a mode parameter in connection with the LIST UPDATES, FETCH DATA, or LIST HISTORY functions, the mode parameter indicating that the client wishes to receive data instances or a list of data instances having status attribute value(s) corresponding to the mode parameter.

12. The data distribution system of any one of claims 7 - 11, wherein the client API provides a PUT function, which the client device can initiate to set the value of the status attribute for a particular data instance.

13. A data distribution method for distributing data from a plurality of service providers to a plurality of client devices, comprising:

- receiving data instances from the service providers within data feeds, each data feed providing a stream of data instances;

- storing, in a data repository, the data instances; and

- storing, in a client repository, status attributes associated with the data instances,

- wherein the client repository stores for each client device a respective collection of status attributes, each collection of status attributes indicating the statuses of the data instances with respect to the respective client device; and

- wherein the method further comprises creating a new status attribute within the collection of status attributes that is associated with a first one of the client devices for each newly received data instance, the new status attribute taking a value indicating that the newly received data instance has yet to be loaded by the first one of the client devices.