



MARKETCAST SERVER

MarketCast Server provides a reliable data delivery mechanism for real-time data over “best efforts” networks such as the internet. Employing sophisticated caching and buffering techniques, MarketCast is open and can be adapted to process real-time data from any open source of market data and news, in addition to existing compatibility with Reuters RMDS/Triarch™ and TIB®/Rendezvous™ platforms. Key product features include:

Data Cache Management

MarketCast creates and maintains a local cache of real-time data, based on requested items. Updates for all items in the cache are monitored in order to keep the cached data up-to-date. Local data cache size is configurable and MarketCast supports cache management, unwatched item removal and pre-emption policies.

Client Management

MarketCast maintains a list of currently connected users with cross-links to the local data cache to reference each user's subscription list. The server may be configured to authenticate every new connection from a user with a username and password. The total number of simultaneous user connections as well as the maximum number of subscription items per user may also be configured.

Intelligent Queue (Conflation)

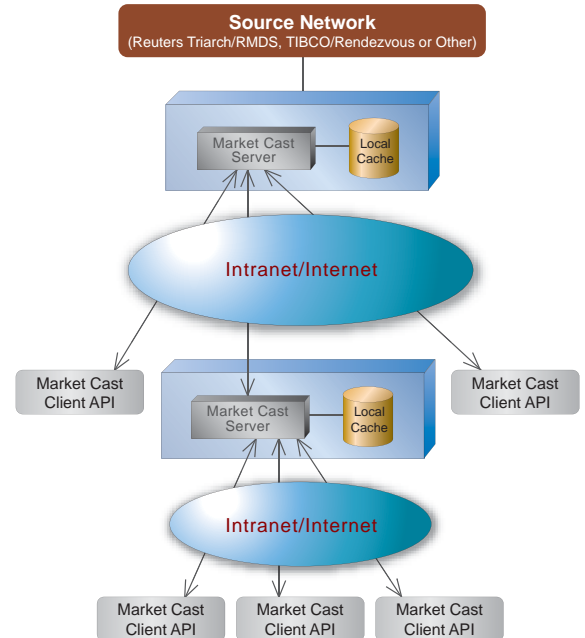
MarketCast maintains a buffer (queue) for outgoing messages to each connected user. If a particular user cannot process updates in real-time, due to network connectivity or hardware/software performance issues, the data which cannot be sent in real-time is placed in the outgoing message buffer. Once this queue reaches its maximum size, the server switches to conflation mode, where it combines new outgoing messages with messages already in the queue in order to guarantee delivery of the latest updates to the user application. The server utilises sophisticated algorithms to guarantee minimal or no information loss.

Data Record Mapping

MarketCast maps fields in the source message to internal field IDs in the resulting message according to a master fields mapping file depending on the source network.

Item Mapping

MarketCast may be configured to map between source network-specific item codes and item codes that use different naming conventions, providing a generic item code interface for user requests. The rules for item mapping are implemented using extended regular expression formulas.





Cascading

MarketCast Server may be configured to connect to another MarketCast Server rather than directly to a source network. This allows for the creation of a cascade of MarketCast Servers such that each one maintaining its own local data cache and thus eliminates unnecessary upstream/downstream data traffic.

Failover

The client application failover mechanism enables users to have a list of possible MarketCast Servers that they may connect to in the event of failure of one or more of the servers.

Data Permission Support

If data on a source network includes permission information, the server maintains permission tables specifying which user is entitled to access specific data.

Logging

MarketCast maintains platform-dependant date and time stamped logs with various start-up and operational messages. Extraordinary conditions are also recorded in the server's log. Once the log is full, it is saved under a different name and a new log is created. In addition, MarketCast also supports platform independent logging facilities such as Unix Eventlog and Windows Syslog.

Delayed Data

MarketCast Delay Server may be configured to operate with delay intervals set either for individual items or for all data. In addition, the server also supports several delay scenarios.

Recording/Playback

MarketCast Server is packaged with real-time data recording and playback functions which may be used for demo and test purposes.

HTTP Tunnelling/Proxy Servers

The MarketCast Server supports HTTP tunneling for exchanging messages with clients connected via firewalls. The server maintains HTTP tunnel connections and wraps all messages with HTTP-like headers to allow them to pass firewall checks. MarketCast also supports persistent connections via Proxy Servers.

Client-side API Libraries

MarketCast Server API libraries (dynamically-linked and statically-linked) are available for Windows 98/NT/2000/XP, Solaris and Linux.