**How are results imported into the Cricinfo system?**

It combines automatic and manual functions.

Both a scorer and a commentator input that information, frequently in the same cabin. The scorer often enters the number of runs made off the ball, if any extras were given up, where the ball was played (on the ground), and other information. Additionally, the scorer enters the next batter as soon as he walks in, the method of dismissal, and the bowler who is about to pitch.

Or the results are immediately loaded using a push, pull, or socket from the stadium scoreboard software.

Diagram, schematic

Description automatically generated

**Product APIS :**

In addition to consuming data for their own websites, Cricinfo and Cricbuzz websites also provide data to merchants and third parties, such as game apps, other sports websites, TV stations, etc.

What information do they sell or share?

**Athletes**: Biographical, biographical, and statistical information on the most famous athletes from all the major sports

LIVE SCORE Leaderboards and calendar headlines

Team pictures, etc.

Since these APIs are paid for, the service provider should give the traffic priority in addition to occasionally offering customization and high availability.

**Scalable APIs:**

Writing so many APIs is necessary since there are so many vendors and everyone has different or unique API requirements. Therefore, we require generic APIs.

**APIS Product Core**

The majority of the time, a single product API is made up of numerous core APIs; in these cases, Binder will call the core APIs concurrently to prepare the product API.

A component called a binder handles merging and returning to the product API while also asynchronously calling core APIs.

What happens if an asynchronous call to one of the core APIs fails?

Make sure that the Product API request and the main call both fail!

To produce dependable results. Since third-party consumers might not have dealt with the situation of incomplete or partial data, we cannot transfer incomplete data to them.

**Content Search Engine:**

Used to order several pieces of content, such as editorial content, WordPress content, scores, and highlights, according to what has been most recently relevant. It provides users with the pertinent content to display.

**CACHING**:

Timeline

Description automatically generated

**REST APIS ARE USED FOR REAL-TIME DATA UPDATE!**

There should be a means to transmit data to clients because sports fans require data in real-time.

In less than 100MS, Cricinfo is capable of sending 1 million WebSocket updates to fans.

What is their method? They employ Redis queues that are associated with each match that takes place during the day, and any updates pertaining to those matches are posted to the associated queue.

1. When a change in the API data is detected, the scheduler will continue to poll the scoring and match statistics API (poll 2–3 times per second to check), and if it is, it will transfer the data to the next step.
2. Then, in order to lower the payload size, the data will be sent to compare the difference between the data sent earlier and the current data. Only fresh information will be delivered to the appropriate queue.
3. Client to WebSocket server connection that FANOUTs data from the Redis queue to clients
4. You never need to use Websockets for old games that have already occurred because the data is readily available and can be accessed using APIS.

**API Monitoring**

Scalable Time Series Database:

OPENTSDB Store and serve enormous volumes of time series data without sacrificing detail.

* Utilises HBase and Hadoop
* Reaches scaling of millions of writes per second
* By adding nodes, increase capacity.
* Create graphs using the GUI.
* Take a look at the HTTP API
* supports the use of Graphana for data visualisation

**Grafana**:

Grafana enables you to query, visualise, receive alerts about, and comprehend your metrics regardless of where they are kept. In order to promote a data-driven culture, create, explore, and share dashboards with your team.