



Gmax Race Jumps Feed Specification

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- The Gmax Race system tracks race horses during real-time. Its minimal infrastructure makes it easy and economical to use, enabling new business opportunities from horse racing.
- Various data feeds are available. This document describes the protocol for a 'Jumps' feed, which provides a list of the typical location of jumps (where available/applicable) for a specified race. It is intended to add additional context to the live tracking data for subscribers.
- The system is under active development. Feedback on possible future improvements is welcome.

- The data for a particular race, or for all races on a given date, can be requested using HTTP(S), providing a Gmax 'Sharecode' parameter as appropriate.
- License key is also required and will be provided separately.
- The response is formatted as an ECMA-404 JSON array of objects each with the following fields:

Description	Name	Type	Example	Notes
Jump Number	J	Number	15	Jump number, counting backwards from the finish line (last jump in the race is number 1)
Length	L	Number	3788.5	Distance between the jump and the finish line, measured along the official running line.

- Example request:

`http://www.gmaxequine.com/TPD/client/jumps.ashx?Sharecode=19201905261515&k=[license key]`

- Example response:

```
[{"J":15,"L":3788.5}, {"J":14,"L":3670.6}, {"J":13,"L":3504.3}, {"J":12,"L":3000.2}, {"J":11,"L":2857.3}, {"J":10,"L":2620.0}, {"J":9,"L":2138.2}, {"J":8,"L":2020.3}, {"J":7,"L":1854.1}, {"J":6,"L":1349.9}, {"J":5,"L":1207.0}, {"J":4,"L":969.7}, {"J":3,"L":488.0}, {"J":2,"L":370.1}, {"J":1,"L":203.8}]
```

- Usage
 - A typical usage scenario for users of live data would be to listen for live data (specifications available separately) and upon receipt of data for a new race, supply the race identifier to this feed to request the jumps information
 - For best efficiency and scalability, we request that the data from this feed is cached by subscribers who are expecting a large number of requests from end users (e.g. consumers using your website or mobile apps).
 - We reserve the right to impose 'fair usage' limits on repetitive requests for the same data.
- Official distance
 - The distance to the jump is measured along the 'official' running line. It is measured in the same way as the 'Progress' parameter in live data feeds, so it is possible by comparing the data in the feeds to determine when the horses reach an expected jump, how many jumps remain until the finish line etc.
 - Note that the official running line is not necessarily the line followed by any particular horse.
- Availability
 - In cases where the data is not available, an empty array will be returned
- Accuracy
 - This feed provides the jump location that is typical for the race type in question. Since many jumps are moveable, this relies on the racecourse placing the jumps in consistent locations
 - Note that some jumps may be avoided during racing for a variety of reasons, just because a jump is listed in this feed does not mean that it is in use for any particular race

- Subscribers to this feed will be kept informed of updates, and as far as possible this will be introduced by extending the data feed described herein to ensure backward compatibility. End users should design their applications to be tolerant to additional JSON messages/objects appearing in the data in future.

If this feed does not meet your requirements, please contact Gmax. Other feeds are also available, including:

- Live tracking data feed, provides the live co-ordinates of each horse in a low-latency data feed
- Live 'Progress' data feed, which summarises the progress of the race as a whole including live running order of the horses, provided as a live low-latency data feed
- By prior arrangement only: a test data feed streaming replays of pre-recorded examples of one or more of the above data feeds, intended for use in final testing by client applications.
- Post-race sectional time data feed, summarising the performance of each horse by section (e.g. at furlong intervals)
- Historical 'Points' data feed, providing the co-ordinates of each horse throughout the race for previously tracked races.
- Historical Sectional times data feed, providing the distribution of sectional times for particular race types based on historical data.
- Race List feed: lists races for which data may be available for any particular date
- Racecourse 'Routes': files containing a description of the official running line at racecourses and typical jump locations using global latitude/longitude co-ordinates.
- Please let us know your requirements and we can recommend the most suitable data for your needs.

The background image is a hazy, golden-hour photograph of a horse race. Silhouetted jockeys on horses are visible in the middle ground, racing across a field. Spectators and tall stadium light poles are visible in the background, creating a sense of depth and atmosphere.

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