



# **SISData365 Feed Overview**

## **May 2011**



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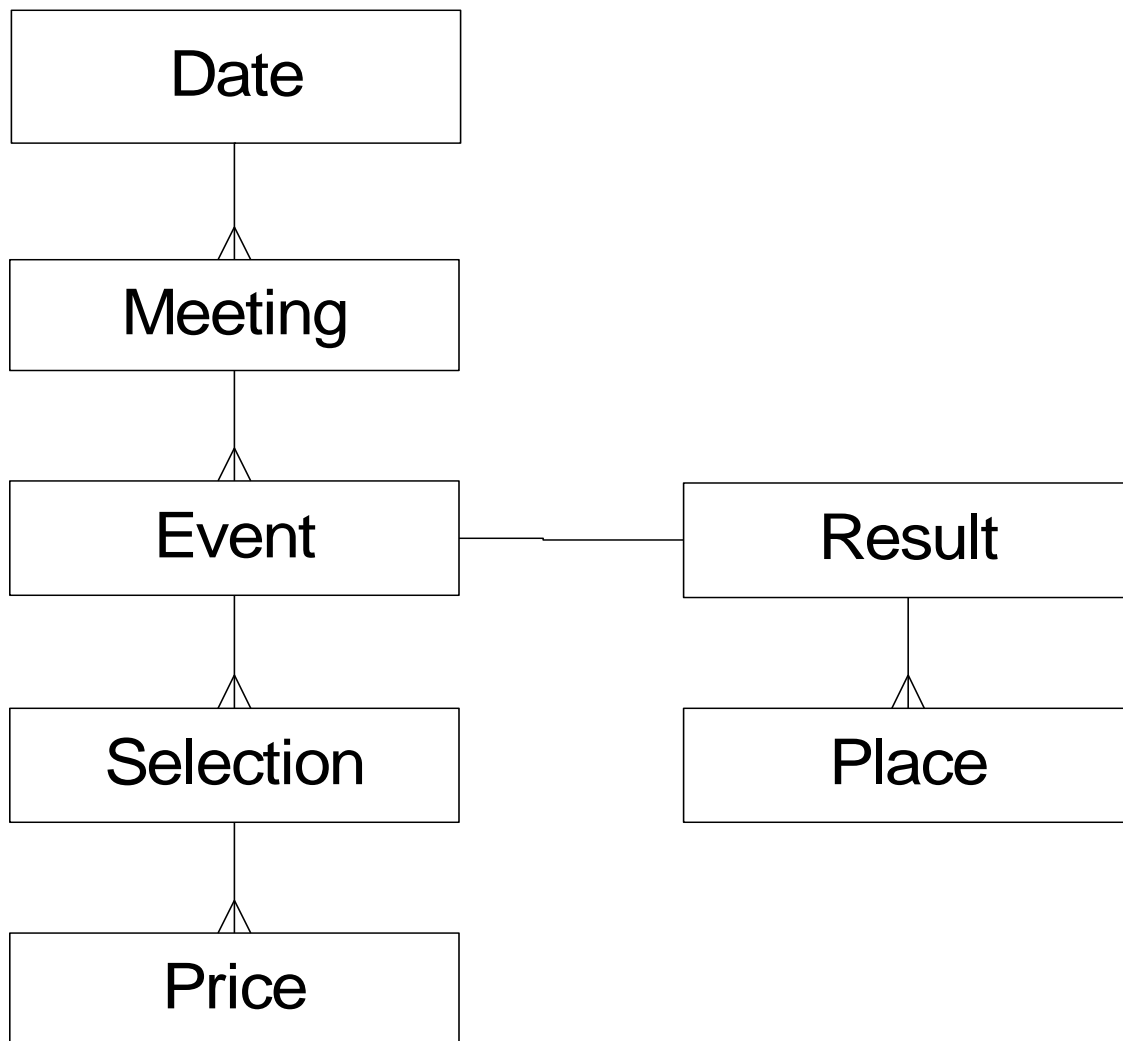
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## Feed Overview

- SISData365 is an XML data feed delivered using ORACLE and Websphere MQ to ensure a low latency betting data feed with guaranteed point to point delivery
  
- Highlights
  - Expanded data feed - EMP, non-BAGS, overseas racing, more events, more betting opportunities (compared to our legacy RAW data feed)
  - Designed to drive websites, screen displays and other systems
  - Vast range of events including horse and greyhound racing, virtual racing and numbers events
  
- SISData365 works on the basis of an XML master document which is then incremented before, during and after an event with XML incremental updates

## Data structure overview



## **Feed Coverage**

- Horse and Greyhound racing UK, Ireland and overseas
- Virtual horse and greyhound content
- Numbers – 49s, Rapido, Irish lottery

## **Horse Racing**

- Sports Data includes all horse meetings included in the SIS and SIS+ service.
- The following master documents are sent:
  - Meeting Index (MI) - a list of the day's meetings.
  - Event Index (EI) - a list of races at a meeting
  - Current Event (CE) - a indication of the currently active race
  - Event (ES) - a race card that is eventually updated with shows and results
  - Non Runner (NR) - a list of the day's non-runners
  - Jockey Change (JC) - a list of the day's jockey changes
  - Cashier's Page (CP) - a specialized back-office page with current prices for pending races
  - Settler's Page (SD) - a specialized back-office page with results of recently completed races
  - Result Summary (RS) - a summary of results of all races at a meeting
  - All these masters are dynamically updated with increments.

- **Day of Meeting**

- The following increments are provided: going details, non-runner details, jockey changes and overweights.

- **Betting Information**

- SISData365 provides an opening show, together with further show prices as and when they occur. It gives market moves in running together with withdrawn notices with price at the time of withdrawal plus any rule 4 deductions.
- It gives race status changes (going down, at the post, going behind) and race 'off' time. If a photo-finish occurs, full details are transmitted and the race result is transmitted as soon as it is known.
- The result includes the placed horses due for payment as accepted by bookmakers under Tattersalls rule. Included is a starting price, favourite status and winning distance and full starting prices for all runners. The result settling status goes through a sequence of changes culminating in the 'Weighed In' official result message.
- Dividend information includes the Computer Straight Forecast and Tricast (where applicable), Place 6 and 5 returns, Tote returns for win, place exacta and trifecta and Placepot and Jackpot returns.

## **BAGS Greyhound Racing**

- **Coverage**
  - Sports Data includes all BAGS greyhound meetings that are included in the SIS and SIS+ service.
- **Race Cards**
  - A race card includes the meeting and race name, the time, grade, description and distance of the race and expected result places. It then includes full runner details (name and trap number) and an indication of the dividends that are available.
- **Range of Master Documents**
  - The range of master documents provided is exactly the same as for horse racing with the exception, of course, of the jockey change page.
- **Day of Meeting Updates**
  - The following increments are provided: changes in going details, vacant trap details when made available by the race course.
- **Betting Information**
  - As for horse racing, Sports Data provides an opening show, together with further show prices as and when they occur. It gives market moves in running together with withdrawn notices with price at the time of withdrawal. It gives race status changes (approaching traps, going in traps, hare running) and race 'off' time. If a photo-finish occurs, full details are transmitted and the race result is transmitted as soon as it is known.



- The result includes the first three places together with favourite status and full starting prices for all runners. The result settling status goes through a sequence of changes culminating in the 'Result and Dividends Complete' result message.
- Dividend information includes the Forecast and Tricast (where applicable) and a Placer return (first and last six races).

## **Non-BAGS Greyhound Racing**

- SISData365 provides a 'result only' service for all the non-BAGS evening greyhound race meetings.
- We additionally provide a live 'in-running' service for a small number of selected meetings each evening. The result only feed simply uses the Result Summary (RS) master whilst the in running service adds the Event (ES) document. These have the same structure as for BAGS greyhound racing.

## **Numbers**

- Coverage
  - The feed covers the following numbers draws, distinguished by subcode. All have identical level of coverage:
    - Rapido (subcode RA)
    - 49s (subcode 49)
    - Irish Lottery (subcode IL)

- **Master Document**
  - There is a master document used for each type of draw named the Numbers Game (NG) master. This is described with a RelaxNG schema definition in compact syntax. Here is an initial and final sample master document for a Rapido draw together with a schema definition.

On day of event the following are provided

- **Rapido**
  - The number of events
  - The off time of each event
  - The result of each event (to include 20 numbers)
  
- **49s**
  - The expected off time of each event
  - The actual off time
  - The result of each event (to include 6 numbers and 1 booster number)
  
- **Irish Lottery**
  - The draw number
  - The expected off time of each event (this is an advised no more bets time)
  - The actual off time (same as expected off time/advised no more bets time)

- The result of each event

## Sample XML

- Master XML Feed snippet:

```

<?xml version="1.0" encoding="UTF-8" ?>
<!--event ODEC master document -->
  <data type="master" odec="Y" id="UKHRES9X1D05" mnem="ES"
    name="event" source="sportsData" version="1.2.11"
    category="HR" country="UK" sportcode="LG" date="2009-05-08"
    timestamp="1241703903319" expiry="2019-05-16T15:45:00"
    route="534453"
    xmlns="http://www.satelliteinfo.co.uk/feed/master/hrdg"
    xmlns:hrdg="http://www.satelliteinfo.co.uk/feed/master/hrdg"
    book="SD">
    <meeting name="Lingfield" code="9X1D0" country="UK"
      date="2009-05-08" sportcode="LG" subcode="FL">
      <event name="7f Maiden Stakes (3y" id="2066367" num="5"
        time="15:45:00" progressCode="X" pmsg="SIS: LIVE"
        placesExpected="3" eachWayPlaces="3" coverageCode="T"
        courseType="F" surface="A" handicap="N" status="O"
        runners="11" distance="7f">
        <selection name="All Spin" id="24909393" num="1" drawn="11"
          status="G" jockey="E Creighton" weightStones="9"
          weightPounds="3" />
        <selection name="Arteus" id="24909394" num="2" drawn="2"
          status="G" jockey="P Cosgrave" weightStones="9"
          weightPounds="3" />
        <selection name="Play It Sam" id="24909395" num="3" drawn="9"
          status="G" jockey="A Kirby" weightStones="9"
          weightPounds="3" />
        <selection name="Quasi Congaree" id="24909396" num="4"
          drawn="7" status="G" jockey="J Crowley" weightStones="9"
          weightPounds="3" />
        <selection name="Truly Asia" id="24909397" num="5" drawn="6"
          status="G" jockey="D Sweeney" weightStones="9"
          weightPounds="3" />
        <selection name="Arrivederla" id="24909398" num="6" drawn="8"
          status="G" jockey="J Doyle" weightStones="8"
          weightPounds="12" />

```



```
<selection name="Fat Chance" id="24909399" num="7"
  drawn="10" status="G" jockey="N Mackay" weightStones="8"
  weightPounds="12" />
<selection name="La Belle Dane" id="24909400" num="8"
  drawn="1" status="G" jockey="S W Kelly" weightStones="8"
  weightPounds="12" />
<selection name="Royal Adelaide" id="24909401" num="9"
  drawn="3" status="G" jockey="J McDonald" weightStones="8"
  weightPounds="12" />
<selection name="Sparkling Cryst" id="24909402" num="10"
  drawn="5" status="G" jockey="C Catlin" weightStones="8"
  weightPounds="12" />
<selection name="Winged Harriet" id="24909403" num="11"
  drawn="4" status="G" jockey="L Jones" weightStones="8"
  weightPounds="12" />
<bar />
<result id="2204704" />
<racebet id="2961970" bettype="F" />
<racebet id="2961971" bettype="P" />
<racebet id="2961972" bettype="W" />
<racebet id="2961973" bettype="X" />
</event>
</meeting>
</data>
```

- **Increment XML feed snippet**

```
<?xml version="1.0" encoding="UTF-8" ?>
<data type="update"
  xmlns:xu="http://www.satelliteinfo.co.uk/feed/update"
  xmlns:hrdg="http://www.satelliteinfo.co.uk/feed/master/hrdg"
  xmlns="http://www.satelliteinfo.co.uk/feed/master/hrdg"
  id="CE2009-05-03"
  name="current_event" mnem="CE" timestamp="1241364558320"
  date="2009-05-03"
  group="SDS" category="HR" source="sportsData" country="UK"
  sportcode="NK"
  route="534453" version="1.2.11">
  <xu:munge select="/hrdg:data">
  <meeting name="Newmarket" code="9X0PD" country="UK"
    date="2009-05-03" __key="code">
  <event id="2063109" num="6" showId="UKHRES9X0PD6"
    time="17:00:00" current="true"
    __key="current" />
  </meeting>
  </xu:munge>
</data>
```

## ODECs and DEC's

- An ODEC is essentially an XML master document
- Every day ODECs are sent at 2:45pm one day in advance of race day
- On the day of racing these masters are resent at 5:30am
- Subsequent increments/updates are targeted to these masters throughout the day
- Saturday ODEC's are processed at 9:00am rather than 2:45pm
- Master documents for sports other than racing are processed at 12:00am

## Recollection

- SIS provides an on-demand recollection for all customers.
- Documents requested are sent to the customers queue for collection.
- Customers can send recollection requests for different sets of documents, between specific dates and specific sports.
- The request is a simple XML document
  - eg All documents for a single date
    - The 'getAllDocumentsForDate' request type will give you all the fully updated documents for a date.
    - ```
<?xml version='1.0' encoding='UTF-8'?>
<RecollectRequests clientId='CLIENTID'>
  <recollect type='getDocumentsForDate'
  date='YYYY-MM-DD'/>
</RecollectRequests>
```



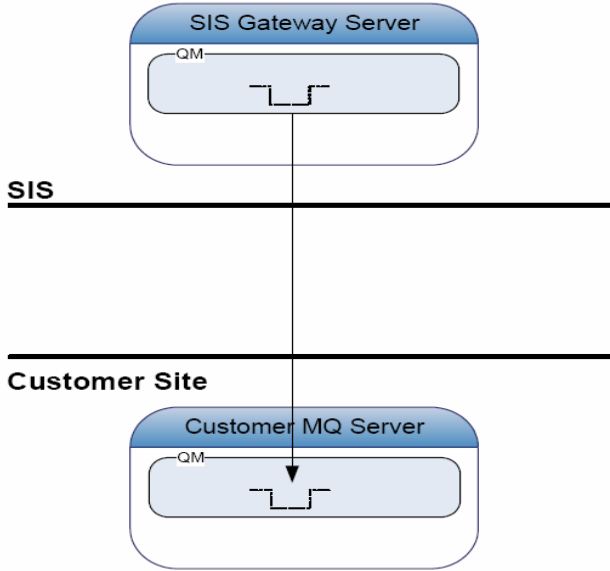
- Recollection request options:
  - A specific named document
  - All documents for a single date and sport
  - All documents for single date, sport category and country
  - All today's documents since a given time
  - All documents for a single date, sport and country
  - All documents for a date, sport, meeting code and document type (EI,MI,ES and RS)
  - All documents for a single date sport and sport code

### **Feed Delivery Options**

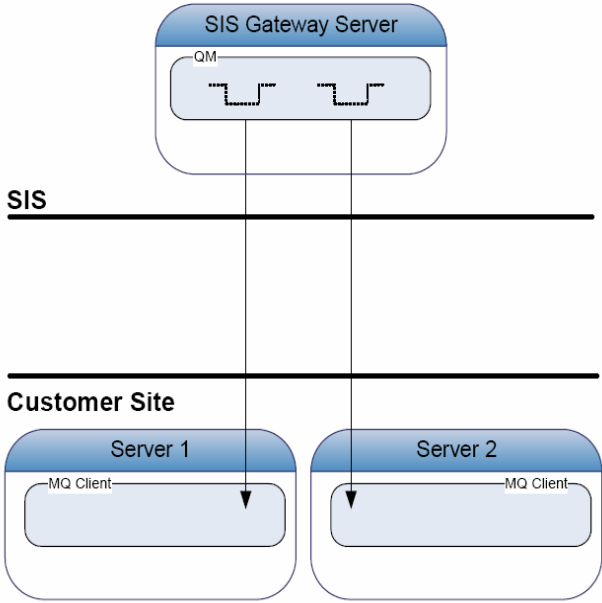
- SIS use Websphere MQ used by financial institutions to guarantee point to point delivery
- Guarantees a client gets the feed and no drop outs/messages can be lost
- Websphere MQ is tried and tested
- Used by SIS for racing with multiple clients with no major issues reported and commended for its robustness of delive

# Two feed options

- Server to server using MQ – expensive



- Server to client using MQ – SIS administer the queue and no licence cost
- Benefits customers





## SISData365 client

- SIS developed software that can be run to automatically connect and dequeue the MQ SISData365 messages
- Client code is written in Java and we have a reference client in C#
- Installs as a windows service running at customer location, irrespective of Java software availability
- Features includes
  - Configurable logging levels (INFO, DEBUG, ERROR, WARN, FATAL)
  - Ability to configure queue manager and queue names as per need.
  - Ability to configure SSL option (enable/disable).
  - XUP processing
    - Ability to save the individual masters in a separate directory
    - Ability to save the increments/updates separately
  - Ability to store masters/updates by sports category and date directory structure



## SISData365 Client GUI

The screenshot shows the 'SD Client' application window. The title bar reads 'SD Client'. Below the title bar is a menu bar with the following items: 'Diagnostics', 'MQ Configuration', 'Settings', 'SSL Configuration', 'Services', and 'About'. The main content area is titled 'Queue Listener Diagnostics:' and contains a table with two columns: 'Item Name' and 'Item Value'. The table lists various system parameters and their current values. A 'Refresh' button is located at the bottom center of the table area.

Item Name	Item Value
MQ Queue Listener	Started
Queue Manager	DBGWTEST7SSL
Input Queue	SPORTSDATA
Unprocessed Queue	SPORTSDATA_UNPROCESSED
SSL	Enabled
Current Dir Structure	Store by Date/Sport
Current Mode of Operation	Save messages Independently
Current Logging Level	DEBUG
Repository Location	/C:/Program Files/SIS/SD Application/

Refresh



## **Further Information**

- Schemas, full specifications, sample data sets and test feeds are available on request
- Please contact Adam Hough – [ahough@sis.tv](mailto:ahough@sis.tv), 0787 250 3245

