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| **F24: Feed appendices document** |

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| **Supplementary information to F24** |

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| --- | --- |
| Appendix 1 – event types | 1 |
| Appendix 2 – qualifier types | 4 |
| Appendix 3 – useful queries | 16 |
| Appendix 4 – assist and keypass interpretation | 19 |
| Appendix 5 – the <Event> tag | 20 |
| Appendix 6 – how events are deleted | 21 |
| Appendix 7 – how events are edited/modified | 22 |
| Appendix 8 – outcome definitions | 23 |
| Appendix 9 – associated qualifiers | 25 |
| Appendix 10 – period ID list | 27 |
| Appendix 11 – pitch co-ordinates and direction of play | 27 |
| Appendix 12 – goalmouth co-ordinates | 28 |
| Appendix 13 – pitch zones | 29 |
| Appendix 14 - playing positions | 30 |

**Contents**

# Appendix 1 – event types

Event types

The following table details the events types used in the F24 feed:

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| **Event id** | **Name** | **Description** |
| 1 | Pass | Any pass attempted from one player to another – free kicks, corners, throw ins, goal kicks and goal assists |
| 2 | Offside Pass | Attempted pass made to a player who is in an offside position |
| 3 | Take On | Attempted dribble past an opponent (excluding when qualifier 211 is present as this is ‘overrun’ and is not always a duel event) |
| 4 | Foul | This event is shown when a foul is committed resulting in a free kick |
| 5 | Out | Shown each time the ball goes out of play for a throw-in or goal kick |
| 6 | Corner Awarded | Ball goes out of play for a corner kick |
| 7 | Tackle | Tackle = dispossesses an opponent of the ball - Outcome 1 = win & retain possession or out of play, 0 = win tackle but not possession |
| 8 | Interception | When a player intercepts any pass event between opposition players and prevents the ball reaching its target. Cannot be a clearance. |
| 9 | Turnover | Unforced error / loss of possession - i.e. bad control of ball – NO LONGER USED (Replaced with Unsuccessful Touch + Overrun) |
| 10 | Save | Goalkeeper event; saving a shot on goal. Can also be an outfield player event with qualifier 94 for blocked shot |
| 11 | Claim | Goalkeeper event; catching a crossed ball |
| 12 | Clearance | Player under pressure hits the ball clear of the defensive zone or/and out of play |
| 13 | Miss | Any shot on goal which goes wide or over the goal |
| 14 | Post | Whenever the ball hits the frame of the goal |
| 15 | Attempt Saved | Shot saved - this event is for the player who made the shot. Qualifier 82 can be added for blocked shot. |
| 16 | Goal | All goals |
| **Event id** | **Name** | **Description** |
| 17 | Card | Bookings; will have red, yellow or 2nd yellow qualifier plus a reason |
| 18 | Player off | Player is substituted off |
| 19 | Player on | Player comes on as a substitute |
| 20 | Player retired | Player is forced to leave the pitch due to injury and the team have no substitutions left |
| 21 | Player returns | Player comes back on the pitch |
| 22 | Player becomes goalkeeper | When an outfield player has to replace the goalkeeper |
| 23 | Goalkeeper becomes player | If goalkeeper becomes an outfield player |
| 24 | Condition change | Change in playing conditions |
| 25 | Official change | Referee or linesman is replaced |
| 27 | Start delay | Used when there is a stoppage in play such as a player injury |
| 28 | End delay | Used when the stoppage ends and play resumes |
| 30 | End | End of a match period |
| 32 | Start | Start of a match period |
| 34 | Team set up | Team line up; qualifiers 30, 44, 59, 130, 131 will show player line up and formation |
| 35 | Player changed position | Player moved to a different position but the team formation remained the same |
| 36 | Player changed Jersey number | Player is forced to change jersey number, qualifier will show the new number |
| 37 | Collection End | Event 30 signals end of half. This signals end of the match and thus data collection. |
| 38 | Temp\_Goal | Goal has occurred but it is pending additional detail qualifiers from Opta. Will change to event 16. |
| 39 | Temp\_Attempt | Shot on goal has occurred but is pending additional detail qualifiers from Opta. Will change to event 15. |
| 40 | Formation change | Team alters its formation |
| 41 | Punch | Goalkeeper event; ball is punched clear |
| 42 | Good Skill | A player shows a good piece of skill on the ball – such as a step over or turn on the ball – NO LONGER USED |
| 43 | Deleted event | Event has been deleted – the event will remain as it was originally with the same ID but will be resent with the type altered to 43. |
| 44 | Aerial | Aerial duel – 50/50 when the ball is in the air – outcome will represent whether the duel was won or lost |
| **Event id** | **Name** | **Description** |
| 45 | Challenge | When a player fails to win the ball as an opponent successfully dribbles past them |
| 47 | Rescinded card | This can occur post match if the referee rescinds a card he has awarded |
| 49 | Ball recovery | Team wins the possession of the ball and successfully keeps possession for at least two passes or an attacking play |
| 50 | Dispossessed | Player is successfully tackled and loses possession of the ball |
| 51 | Error | Mistake by player losing the ball. Leads to a shot or goals as described with qualifier 169 or 170 |
| 52 | Keeper pick-up | Goalkeeper event; picks up the ball |
| 53 | Cross not claimed | Goalkeeper event; cross not successfully caught |
| 54 | Smother | Goalkeeper event; comes out and covers the ball in the box winning possession |
| 55 | Offside provoked | Awarded to last defender when an offside decision is given against an attacker |
| 56 | Shield ball opp | Defender uses his body to shield the ball from an opponent as it rolls out of play |
| 57 | Foul throw-in | A throw-in not taken correctly resulting in the throw being awarded to the opposing team |
| 58 | Penalty faced | Goalkeeper event; penalty by opposition team |
| 59 | Keeper Sweeper | When keeper comes off his line and/or out of his box to clear the ball |
| 60 | Chance missed | Used when a player does not actually make a shot on goal but was in a good position to score and only just missed receiving a pass |
| 61 | Ball touch | Used when a player makes a bad touch on the ball and loses possession. Outcome 1 – ball simply hit the player unintentionally. Outcome 0 – Player unsuccessfully controlled the ball. |
| 63 | Temp\_Save | An event indicating a save has occurred but without full details. Event 10 will follow shortly afterwards with full details. |
| 64 | Resume | Match resumes on a new date after being abandoned mid game. |
| 65 | Contentious referee decision | Any major talking point or error made by the referee – decision will be assigned to the relevant team |

# Appendix 2 – qualifier types

Qualifier types

These tables highlight the list of qualifier\_id attributes that we include in this feed.

An appendix follows that details the list of qualifier\_id attributes that you can reasonably expect to see against an associated type\_id.

The following tables detail the qualifiers that you should expect to see in F24:

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Pass Events** | **Values** | **Description - ASSOCIATED TO EVENT TYPE 1** |
| **1** | Long ball |  | Long pass over 35 yards |
| **2** | Cross |  | A ball played in from wide areas into the box |
| **3** | Head pass |  | Pass made with a players head |
| **4** | Through ball |  | Ball played through for player making an attacking run to create a chance on goal |
| **5** | Free kick taken |  | Any free kick; direct or indirect |
| **6** | Corner taken |  | All corners. Look for qualifier 6 but excluding qualifier 2 for short corners |
| **7** | Players caught offside | Player ID | Player who was in an offside position when pass was made. |
| **8** | Goal disallowed |  | Pass led to a goal disallowed for a foul or offside |
| **106** | Attacking Pass |  | A pass in the opposition’s half of the pitch |
| **107** | Throw-in |  | Throw-in taken |
| **140** | Pass End X | 0-100 | The x pitch coordinate for the end point of a pass - See Appendix 5 |
| **141** | Pass End Y | 0-100 | The y pitch coordinate for the end point of a pass - See Appendix 5 |
| **155** | Chipped |  | Pass which was chipped into the air |
| **156** | Lay-off |  | Pass where player laid the ball into the path of a teammates run |
| **157** | Launch |  | Pass played from a player’s own half up towards front players. Aimed to hit a zone rather than a specific player |
| **168** | Flick-on |  | Pass where a player has "flicked" the ball forward using their head |
| **ID** | **Pass Events** | **Values** | **Description - ASSOCIATED TO EVENT TYPE 1** |
| **195** | Pull Back |  | Player in opposition’s penalty box reaches the by-line and passes (cuts) the ball backwards to a teammate |
| **196** | Switch of play |  | Any pass which crosses the centre zone of the pitch and in length is greater than 60 on the y axis of the pitch |
| **210** | Assist |  | The pass was an assist for a shot. The type of shot then dictates whether it was a goal assist or just key pass. |
| **212** | Length | Dynamic - yards of pitch | The estimated length the ball has travelled during the associated event. |
| **213** | Angle | 0 to 6.28 (Radians) | The angle the ball travels at during an event relative to the direction of play. Shown in radians. |
| **218** | 2nd assist |  | Pass was deemed a 2nd assist - created the opportunity for another player to assist a goal |
| **219** | Players on both posts |  | Assigned to event 6 indicating there were defensive players on both posts when a corner was taken |
| **220** | Player on near post |  | Assigned to event 6 indicating there was a defensive player on only the near post when a corner was taken |
| **221** | Player on far post |  | Assigned to event 6 indicating there was a defensive player on only the far post when corner was taken |
| **222** | No players on posts |  | Assigned to event 6 indicating there were no defensive players on either post when a corner was taken |
| **223** | In-swinger |  | Corner was crossed into the box swerving towards the goal |
| **224** | Out-swinger |  | Corner was crossed into the box swerving away from the goal |
| **225** | Straight |  | Corner was crossed into the box with a straight ball flight |

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| **ID** | **Body Part** | **Values** | **Description** |
| **15** | Head |  | Any event where the player used their head such as a shot or a clearance |
| **72** | Left footed |  | Player shot with their left foot |
| **20** | Right footed |  | Player shot with right footed |
| **21** | Other body part |  | Shot was neither via a player’s head or foot for example knee or chest |
|  |  |  |  |
| **ID** | **Pattern of Play** | **Values** | **Description - ASSOCIATED TO EVENT TYPES 13, 14, 15, 16** |
| **22** | Regular play |  | Shot during open play as opposed to from a set play |
| **23** | Fast break |  | Shot occurred following a fast break situation |
| **24** | Set piece |  | Shot occurred from a crossed free kick |
| **25** | From corner |  | Shot occurred from a corner |
| **26** | Free kick |  | Shot occurred directly from a free kick |
| **96** | Corner situation |  | Pass or shot event in corner situation. 25 is used when the goal is direct from corner, 96 relates to 2nd phase attack. |
| **97** | Direct free |  | 26 will be used for shot directly from a free kick. 97 only used with Opta GoalData (game system 4) but not with full data. |
| **112** | Scramble |  | Goal where there was a scramble for possession of the ball and the defence had an opportunity to clear |
| **160** | Throw-in set piece |  | Shot came from a throw-in set piece |
| **29** | Assisted |  | Indicates that there was a pass (assist) from another player to set up the goal opportunity |
| **154** | Intentional assist |  | Shot from an intentional assist i.e. The assisting player intended the pass, no deflection etc |
| **55** | Related event ID | Event\_id | This will appear for goals or shots, the related event\_id will be that of the assist and thus show the assisting player ID |
| **216** | 2nd related event ID | Event\_id | If there was a 2nd assist, i.e a pass to create the opportunity for the player making the assist. MLS and German Bundesliga 1 & 2. |

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| **ID** | **Shot Descriptors** | **Values** | **Description - ASSOCIATED TO EVENT TYPES 13, 14, 15, 16** |
| **9** | Penalty |  | When attempt on goal was a penalty kick. ALSO used on Event type 4 to indicate a penalty was awarded |
| **28** | Own goal |  | Own goal . *Note: Use the inverse coordinates of the goal location* |
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| **113** | Strong |  | Shot was subjectively classed as strong |
| **114** | Weak |  | Shot was subjectively classed as weak |
| **115** | Rising |  | Shot was rising in the air |
| **116** | Dipping |  | Shot was dipping towards the ground |
| **117** | Lob |  | Shot was an attempt by the attacker to play the ball over the goalkeeper and into the goal |
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| **120** | Swerve Left |  | Shot which swerves to the left - from attackers perspective |
| **121** | Swerve Right |  | Shot which swerves to the right - from attackers perspective |
| **122** | Swerve Moving |  | Shot which swerves in several directions |
| **133** | Deflection |  | Shot deflected off another player |
| **136** | Keeper Touched |  | Goal where the goalkeeper got a touch on the ball as it went in |
| **137** | Keeper Saved |  | Shot going wide or over the goal but still collected/saved by the goalkeeper with event type 15 |
| **138** | Hit Woodwork |  | Any shot which hits the post or crossbar |
| **153** | Not past goal line |  | Shot missed which does not pass the goal line |
| **214** | Big Chance |  | Shot was deemed by Opta analysts an excellent opportunity to score – clear cut chance eg one on one |
| **215** | Individual Play |  | Player created the chance to shoot by himself, not assisted. For example he dribbled to create space for himself and shot. |
| **ID** | **Shot Descriptors** | **Values** | **Description - ASSOCIATED TO EVENT TYPES 13, 14, 15, 16** |
| **217** | 2nd assisted |  | Indicates that this shot had a significant pass to create the opportunity for the pass which led to a goal |
| **228** | Own shot blocked |  | Player blocks an attacking shot unintentionally from their teammate |

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| **ID** | **Shot Location Descriptors** | **Values** | **Description** |
| **16** | Small box-centre |  | Zone of the pitch - See appendix 7 |
| **17** | Box-centre |  | Zone of the pitch - See appendix 7 |
| **18** | Out of box-centre |  | Zone of the pitch - See appendix 7 |
| **19** | 35+ centre |  | Zone of the pitch - See appendix 7 |
| **60** | Small box-right |  | Zone of the pitch - See appendix 7 |
| **61** | Small box-left |  | Zone of the pitch - See appendix 7 |
| **62** | Box-deep right |  | Zone of the pitch - See appendix 7 |
| **63** | Box-right |  | Zone of the pitch - See appendix 7 |
| **64** | Box-left |  | Zone of the pitch - See appendix 7 |
| **65** | Box-deep left |  | Zone of the pitch - See appendix 7 |
| **66** | Out of box-deep right |  | Zone of the pitch - See appendix 7 |
| **67** | Out of box-right |  | Zone of the pitch - See appendix 7 |
| **68** | Out of box-left |  | Zone of the pitch - See appendix 7 |
| **69** | Out of box-deep left |  | Zone of the pitch - See appendix 7 |
| **70** | 35+ right |  | Zone of the pitch - See appendix 7 |
| **71** | 35+ left |  | Zone of the pitch - See appendix 7 |
| **73** | Left |  | Hit the left post or missed left |
| **74** | High |  | Hit crossbar or missed over |
| **75** | Right |  | Hit right post or missed right |
| **76** | Low left |  | Zone of the goalmouth - See appendix 6 |
| **ID** | **Shot Location Descriptors** | **Values** | **Description** |
| **77** | High left |  | Zone of the goalmouth - See appendix 6 |
| **78** | Low centre |  | Zone of the goalmouth - See appendix 6 |
| **79** | High centre |  | Zone of the goalmouth - See appendix 6 |
| **80** | Low right |  | Zone of the goalmouth - See appendix 6 |
| **81** | High right |  | Zone of the goalmouth - See appendix 6 |
| **82** | Blocked |  | Zone of the goalmouth - See appendix 6 |
| **83** | Close left |  | Zone of the goalmouth - See appendix 6 |
| **84** | Close right |  | Zone of the goalmouth - See appendix 6 |
| **85** | Close high |  | Zone of the goalmouth - See appendix 6 |
| **86** | Close left and high |  | Zone of the goalmouth - See appendix 6 |
| **87** | Close right and high |  | Zone of the goalmouth - See appendix 6 |
| **100** | Six yard blocked |  | Shot blocked on the 6 yard line |
| **101** | Saved off line |  | Shot saved on the goal line |
| **102** | Goal mouth y co-ordinate | 0-100 | Y Co-ordinate of where a shot crossed goal line - see Appendix 4 |
| **103** | Goal mouth z co-ordinate | 0-100 | Z Co-ordinate for height at which a shot crossed the goal line - see Appendix 4 |
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| **146** | Blocked x co-ordinate | 0-100 | The x pitch coordinate for where a shot was blocked |
| **147** | Blocked y co-ordinate | 0-100 | The y pitch coordinate for where a shot was blocked |

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| **ID** | **Foul & Card Events** | **Values** | **Description - ASSOCIATED TO EVENT TYPE 4 except for cards** |
| **10** | Hand |  | Handball |
| **11** | 6-seconds violation |  | Goalkeeper held onto the ball longer than 6 seconds resulting in a free kick |
| **12** | Dangerous play |  | A foul due to dangerous play |
| **13** | Foul |  | All fouls |
| **31** | Yellow Card |  | Player shown a yellow card |
| **32** | Second yellow |  | Player receives a 2nd yellow card which automatically results in a red card |
| **33** | Red card |  | Player shown a straight red card |
| **34** | Referee abuse |  | Card shown to player because of abuse to the referee |
| **35** | Argument |  | Card shown to player because of an argument |
| **36** | Fight |  | Card shown to player because of their involvement in a fight |
| **37** | Time wasting |  | Card shown to player for time wasting |
| **38** | Excessive celebration |  | Card shown to player for excessively celebrating a goal |
| **39** | Crowd interaction |  | Card shown to player because of contact or communication with the crowd |
| **40** | Other reason |  | Card shown for unknown reason |
| **95** | Back pass |  | Free kick given for an illegal pass to the goalkeeper which was collected by his hands or picked up |
| **132** | Dive |  | Free kick or card event; player penalised for simulation |
| **158** | Persistent infringement |  | Card shown to player for persistent fouls |
| **159** | Foul and abusive language |  | Card shown for player using foul language |
| **161** | Encroachment |  | Card shown for player who moves within 10 yards of an opponent’s free kick |
| **162** | Leaving field |  | Card shown for player leaving the field without permission |
| **163** | Entering field |  | Card shown for player entering the field during play without referee's permission |
| **164** | Spitting |  | Card shown for spitting |
| **165** | Professional foul |  | Card shown for a deliberate tactical foul |
| **166** | Handling on the line |  | Card shown to an outfield player for using their hand to keep the ball out of the goal |
| **ID** | **Foul & Card Events** | **Values** | **Description - ASSOCIATED TO EVENT TYPE 4 except for cards** |
| **171** | Rescinded card |  | Referee rescind a card post match |
| **172** | No impact on timing |  | Player booked on bench but who hasn't played any minutes in the match |
| **184** | Dissent |  | Cad shown when a player does not obey referee instructions |
| **191** | Off the ball foul |  | Foul committed by and on a player who is not in possession of the ball |
| **192** | Block by hand |  | Outfield player blocks a shot with their hand |

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| **ID** | **Goalkeeper Events** | **Values** | **Description - EVENT TYPES 10, 11, 12** |
| **190** | From shot off target |  | Used with Event 10. Indicates a shot was saved by the goalkeeper but in fact the shot was going wide and not on target |
| **88** | High claim |  | Event 11 Claim - Goalkeeper claims possession of a crossed ball |
| **89** | 1 on 1 |  | Event 10 Save; when attacker was clear with no defenders between him and the goalkeeper |
| **90** | Deflected save |  | Event 10 Save; when goalkeeper saves a shot but does not catch the ball |
| **91** | Dive and deflect |  | Event 10 Save; when goalkeeper saves a shot while diving but does not catch the ball |
| **92** | Catch |  | Event 10 Save; when goalkeeper saves a shot and catches it |
| **93** | Dive and catch |  | Event 10 Save; when goalkeeper saves a shot while diving and catches it |
| **123** | Keeper Throw |  | Pass event - goalkeeper throws the ball out |
| **124** | Goal Kick |  | Pass event – goal kick |
| **128** | Punch |  | Clearance by goalkeeper where he punches the ball clear |
| **139** | Own Player |  | Shot saved by goalkeeper that was deflected by a defender |
| **173** | Parried safe |  | Goalkeeper save where shot is parried to safety |
| **174** | Parried danger |  | Goalkeeper save where shot is parried but only to another opponent |
| **175** | Fingertip |  | Goalkeeper save using his fingertips |
| **176** | Caught |  | Goalkeeper catches the ball |
| **177** | Collected |  | Goalkeeper save and collects possession of the ball |
| **ID** | **Goalkeeper Events** | **Values** | **Description - EVENT TYPES 10, 11, 12** |
| **178** | Standing |  | Goalkeeper save while standing |
| **179** | Diving |  | Goalkeeper save while diving |
| **180** | Stooping |  | Goalkeeper saves while stooping |
| **181** | Reaching |  | Goalkeeper save where goalkeeper reaches for the ball |
| **182** | Hands |  | Goalkeeper saves with his hands |
| **183** | Feet |  | Goalkeeper save using his feet |
| **186** | Scored |  | Goalkeeper event - shots faced and not saved resulting in goal |
| **187** | Saved |  | Goalkeeper event - shots faced and saved |
| **188** | Missed |  | Goalkeeper event - shot faced which went wide or over. Did not require a save. |
| **198** | GK hoof |  | Goalkeeper drops the ball on the ground and kicks it long towards a position rather than a specific player |
| **199** | Gk kick from hands |  | Goalkeeper kicks the ball forward straight out of his hands |

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| **ID** | **Defensive Events** | **Values** | **Description** |
| **14** | Last line |  | When a player makes a defensive action and they are the last person between the opponent and the goal |
| **94** | Def block |  | Defender blocks an opposition shot. Shown with event 10. |
| **167** | Out of play |  | Tackle or clearance event sent the ball out of play |
| **169** | Leading to attempt |  | A player error, event 51, which leads to an opponent shot on goal |
| **170** | Leading to goal |  | A player error, event 51, which lead to an opponent scoring a goal |
| **185** | Blocked cross |  | Clearance; cross is blocked |

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| **ID** | **Line Up / Subs / Formation** | **Values** | **Description - ASSOCIATED WITH EVENT TYPES 32, 34, 35, 36, 40** |
| **30** | Involved | Player ID's in line up | This will show all players in the starting line up and available as a substitute |
| **41** | Injury |  | Substitution, event 18, because of injury |
| **42** | Tactical |  | Substitution, event 18 for tactical reasons |
| **44** | Player position | *Dynamic* | Goalkeeper, Defender, Midfielder, Forward or Substitute. These are the default / natural positions associated with each player and not necessarily the position they played in the match; see qualifier 131 for this. |
| **59** | Jersey number | Shirt number of player(s) | This will be shown for substitutions, line ups, line up changes |
| **130** | Team formation | Formation ID | See appendix 8 |
| **131** | Team player formation | 1 to 11 | Player position within a formation - 'See appendix 8 |
| **145** | Formation slot | 1 to 11 | Formation position of a player coming on - see appendix 8 |
| **194** | Captain | Player ID | ID of the player who is the team captain |
| **197** | Team kit | Kit ID | Kit of the team |
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| **ID** | **Referee** | **Values** | **Description** |
| **50** | Official position | 1, 2, 3, 4 | Referee, Linesman#1, Linesman#2, Forth official |
| **51** | Official ID | Official ID | Unique ID for the official |
| **200** | Referee stop |  | Referee stops play |
| **201** | Referee delay |  | Delay in play instructed by referee |
| **208** | Referee Injury |  | Referee injured |

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| **ID** | **Attendance** | **Values** | **Description** |
| **49** | Attendance figure | *Dynamic* | Number of people in the crowd |

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| **ID** | **Stoppages** | **Values** | **Description - EVENT TYPE 27** |
| **53** | Injured player id | ID of player injured | ID of the player who is injured and causing a delay in the game |
| **202** | Weather problem |  | Bad weather stops or interrupts play |
| **203** | Crowd trouble |  | Trouble within the crowd stops or delays play |
| **204** | Fire |  | Fire with the stadium stops or delays play |
| **205** | Object thrown on pitch |  | Object throw from the crowd lands on the pitch and delays play |
| **206** | Spectator on pitch |  | Spectator comes onto the pitch and forces a delay in play |
| **207** | Awaiting officials decision |  | Given to an event/delay where the referee still has to make a decision |
| **208** | Referee injury |  | Referee sustained injury causing stoppage in play |
| **226** | Suspended |  | Game is has not finished but is suspended |
| **227** | Resume |  | Game has resumed after being suspended mid-way through on a previous date |

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| **ID** | **General** | **Values** | **Description** |
| **54** | End cause | 1,2,3,4,5,6,7,99,100 | Golden goal, weather, crowd, insufficient players, floodlight failure, frozen pitch, waterlogged pitch, other, unknown |
| **56** | Zone | Back, left, centre, right | Area on the pitch - see appendix 7 |
| **57** | End type |  | End of the match |
| **127** | Direction of play | Right to Left | Event type 32 - Actual direction of play in relation to TV camera. X/Y coordinates however are ALWAYS all normalized to **Left to Right.** |
| Left to Right |
| **144** | Deleted event type | Event ID | An event which should be removed. Value will show the ID of this event |
| **189** | Player not visible |  | Broadcast footage showing replay and not live footage – this event is what Opta analysts believe occurred. |
| **209** | Game end |  | The game is finished |
| **211** | Overrun |  | TAKE ON (3) – where a player takes on an opponent but the ball runs away from them out of play or to an opponent. |
| **229** | Post-match complete |  | Opta post match quality control has been completed on this match |
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# Appendix 3 – useful queries

Below is a table that can be used as a guide to calculate some of the more common statistic types from the F24 data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **English** | **type\_id** | **outcome** | **qualifier\_id** | **Extra info** | ***EXCLUDING EVENTS WITH THESE QUALIFIERS*** |
| **passes total** | *1* | *-* | *-* | Include short corners where qualifier 6 is present but not qualifier 2 | *2, 5, 6, 107, 123,124* |
| **Passes successful** | *1* | *1* | *-* |  | *2, 5, 6, 107, 123,124* |
| **passes unsuccessful** | *1* | *0* | *-* |  | *2, 5, 6, 107, 123,124* |
| **Crosses Total (open play)** | *1* | *-* | *2* |  | *5, 6* |
| **Successful Crosses Total (open)** | *1* | *1* | *2* |  | *5, 6* |
| **Unsuccessful Crosses Total (excl corners & Free kicks)** | *1* | *0* | *2* |  | *5, 6* |
| **assists total \*** | *16* | *1* | *29, 55* | Value of 55 = event\_id of the assisting pass |  |
| **key passes total \*** | *13, 14, 15* | *-* | *29, 55* | Value of 55 = event\_id of the key pass |  |
| **offensive passes total** | *1* | *-* |  | If (x < end\_x) | *2, 5, 6, 107, 123,124* |
| **offensive passes won** | *1* | *1* |  | If (x < end\_x) | *2, 5, 6, 107, 123,124* |
| **offensive passes lost** | *1* | *0* |  | If (x < end\_x) | *2, 5, 6, 107, 123,124* |
| **defensive/backward passes** | *1* | *-* |  | If (x > end\_x) | *2, 5, 6, 107, 123,124* |
| **sideway passes total** | *1* | *-* |  | If (x = end\_x) | *2, 5, 6, 107, 123,124* |
| **long passes total** | *1* | *-* | *1* |  | *2, 5, 6, 107, 123,124* |
| **long passes won** | *1* | *1* | *1* |  | *2, 5, 6, 107, 123,124* |
| **long passes lost** | *1* | *0* | *1* |  | *2, 5, 6, 107, 123,124* |
| **aerial total** | *44* | *-* |  |  |  |
| **aerial won** | *44* | *1* |  |  |  |
| **aerial lost** | *44* | *0* |  |  |  |
| **ground duels total** | *3,4,7,45,54* | *-* |  |  |  |
| **ground duels won** | *3, 4,7,54* | *1* |  |  |  |
| **ground duels lost** | *3, 4,7,45,50* | *0* |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **English** | **type\_id** | **outcome** | **qualifier\_id** | **Extra info** | ***EXCLUDING EVENTS WITH THESE QUALIFIERS*** |
| **Free kicks taken total** | *1* | *-* | *5* |  |  |
| **Fouls total** | *4* | *-* |  |  |  |
| **Fouls won** | *4* | *1* |  |  |  |
| **Fouls conceded** | *4* | *0* |  |  |  |
| **handball conceded** | *4* | *0* | *10* |  |  |
| **corners total** | *1* | *-* | *6* | Crossed corners include qualifier 2, short corner without qualifier 2 |  |
| **corners into box - successful** | *1* | *1* | *6* | If (83 < end\_x < 100)  If (21 < end\_y < 78.9) |  |
| **corners into box - unsuccessful** | *1* | *0* | *6* | If (83 < end\_x < 100)  If (21 < end\_y < 78.9) |  |
| **interceptions** | *8* | *-* |  |  |  |
| **tackles won** | *7* | *1 or 0* |  | Outcome 1 – tackle won and possession won or ball went out of play. Outcome 0 – only tackle won no possession won |  |
| **Tackle lost - Challenge** | *45* | *0* |  |  |  |
| **saves total** | *10* | *1* |  |  |  |
| **Save (block by outfielder)** | *10* | *1* | *94* |  |  |
| **Claim (gk catches cross)** | *11* | *1* |  |  |  |
| **clearance won** | *12* | *1* |  |  |  |
| **clearance lost** | *12* | *0* |  |  |  |
| **headed clearance won** | *12* | *1* | *15* |  |  |
| **headed clearance lost** | *12* | *0* | *15* |  |  |
| **Total shots** | *13,14,15,16* | *-* |  |  |  |
| **shots on target** | *15,16* | *-* |  |  | *82 (blocked shots)* |
| **shots off target** | *13,14* | *-* |  |  |  |
| **Goals** | *16* | *1* |  |  |  |
| **Goals from open play** | *16* | *1* | *22* |  |  |
| **Goals from set plays** | *16* | *1* | *24* |  |  |
| **Goals from penalties** | *16* | *1* | *9* |  |  |
| **Own Goals** | *16* | *0* | *28* | Team\_id will be the team conceding the own goal |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **English** | **type\_id** | **outcome** | **qualifier\_id** | **Extra info** | ***EXCLUDING EVENTS WITH THESE QUALIFIERS*** |
| **headed shots on target** | *15,16* | *-* | *15* |  | *82 (blocked shots)* |
| **headed shots total** | *13,14,15,16,24* | *-* | *15* |  |  |
| **headed shots off target** | *13,14* | *-* | *15* |  |  |
| **shots blocked by outfielder** | *15* | *-* | *82* |  |  |
| **Total touches** | *See below\*\** | *-* |  |  |  |
| **Successful Take on (dribble)** | *3* | *1* |  |  |  |
| **Unsuccessful Take on (dribble)** | *3* | *0* |  | Qualifier 211 indicates an “overrun” which is not always a duel event. Optional to include these. |  |
| **Fouls won** | *4* | *1* |  |  |  |
| **Fouls conceded** | *4* | *0* |  |  |  |
| **Penalty conceded** | *4* | *0* | *9* |  |  |
| **Yellow Card** | *17* | *-* | *31* |  |  |
| **2nd Yellow Cards** | *17* | *-* | *32* |  |  |
| **Red Cards** | *17* | *-* | *33* |  |  |

**\*\*Touches**

To calculate all touches, aggregate all events with the following event type ids - *irrespective of qualifiers or outcomes or position*:

*2, 3, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 41, 42, 50, 52, 54 and 61.*

Plus all event type id 1 - *except those flagged with qualifier 123.*

# Appendix 4 – assist and keypass interpretation

When qualifier**=”55”** is present, then look for its corresponding **value=””**; this will show you the value of the **event\_id=””** to look at to find information. It is basically telling you that the shot on goal was assisted (in this case a ‘keypass’) by a pass and it is telling you where to look to find the pass details.

**For example:**

<Event id=**"783279345"** event\_id=**"170"** type\_id=**"1"** period\_id=**"1"** min=**"20"** sec=**"33"** player\_id=**"19645"** team\_id=**"52"** outcome=**"1"** x=**"98.0"** y=**"65.9"** keypass=**"1"** timestamp=**"2011-08-13T15:21:16.403"** last\_modified=**"2011-08-13T17:21:17"**>

<Q id=**"1360104517"** qualifier\_id=**"140"** value=**"95.7"** />

<Q id=**"716687577"** qualifier\_id=**"154"** />

<Q id=**"1024698286"** qualifier\_id=**"141"** value=**"69.8"** />

<Q id=**"548528358"** qualifier\_id=**"213"** value=**"2.3"** />

<Q id=**"1464195139"** qualifier\_id=**"212"** value=**"3.6"** />

<Q id=**"811964232"** qualifier\_id=**"56"** value=**"Center"** />

<Q id=**"629946245"** qualifier\_id=**"210"** />

</Event>

<Event id=**"1079282470"** event\_id=**"171"** type\_id=**"15"** period\_id=**"1"** min=**"20"** sec=**"35"** player\_id=**"2019"** team\_id=**"52"** outcome=**"1"** x=**"95.7"** y=**"69.8"** timestamp=**"2011-08-13T15:21:17.559"** last\_modified=**"2011-08-13T17:21:18"**>

<Q id=**"1372749641"** qualifier\_id=**"76"** />

<Q id=**"1476860249"** qualifier\_id=**"20"** />

<Q id=**"607536004"** qualifier\_id=**"102"** value=**"53.5"** />

<Q id=**"852431923"** qualifier\_id=**"65"** />

<Q id=**"951864007"** qualifier\_id=**"154"** />

<Q id=**"1904271995"** qualifier\_id=**"56"** value=**"Center"** />

<Q id=**"995057860"** qualifier\_id=**"103"** value=**"4.2"** />

<Q id=**"1206524667"** qualifier\_id=**"146"** value=**"99.7"** />

<Q id=**"1896231395"** qualifier\_id=**"22"** />

<Q id=**"119954813"** qualifier\_id=**"147"** value=**"53.8"** />

<Q id=**"432940257"** qualifier\_id=**"29"** />

<Q id=**"2000327362"** qualifier\_id=**"55"** value=**"170"** />

</Event>

* So you can see that the value attribute with **qualifier\_id=”55”** is telling you to look at **event\_id=”170”** from the preceding event.
* By looking at **event\_id=”170”** you can see this was a pass (**type\_id=”1”**) and **qualifier\_id=”55”** tells you that it assisted the shot on goal that was saved (**type\_id=”15”**).
* Note that **keypass=”1”** indicates a pass that led directly to a shot on goal (but not a goal) and **assist=”1”** denotes a pass that led directly to a shot that was a goal.

# Appendix 5 – the <Event> tag

Some of the attributes within the <Event> tag can cause confusion when it comes to interpreting their meanings and uses.

**An example:**

<Event id=**"2044318208"** event\_id=**"153"** type\_id=**"5"** period\_id=**"1"** min=**"19"** sec=**"31"** player\_id=**"49396"** team\_id=**"368"** outcome=**"1"** x=**"-2.0"** y=**"53.3"** timestamp=**"2012-06-23T20:04:45.40"** last\_modified=**"2012-06-23T20:04:45"**>

**Definitions:**

* id=**"2044318208"** This is the absolute unique integer that we assign to each individual match event and it can be used to database the event and search at a later date.
* event\_id=**"153"** This is the reference to the order of the match events *within this match only* and the count runs simultaneously for each team.

For example *(NB in a real F24b match file, the two event\_id****=”1”*** *attributes are actually the team line-ups, so treat the below example as merely theory for illustrative purposes):*

* + Team A’s first match event is a successful pass from player 1 to player 2, so this is event\_id**=”1”**; the second event is another successful pass from player 2 to player 3, so this is event\_id**=”2”**; the third event is an unsuccessful pass from player 3 to player 4 as it was intercepted by the opposite team, so the event\_id count stops at **“2”** for Team A (until they get the ball back in possession, at which point their count will start again at **“3”**). Now that Team B have the ball, let’s say there is a successful pass from their player 1 to their player 2, so Team B’s event\_id count begins at **“1”**, then there’s another successful pass from their player 2 to player 3, so this is event\_id**=”2”** … this alternate ascending count continues through the match for both teams as their number of match events increase.
* timestamp=**"2012-06-23T20:04:45.40"** This is the timestamp that relates to the date and time that *the event occurred within the match.*
* last\_modified=**"2012-06-23T20:04:45"** This relates to the time that the event was *last modified by our analysts,* for example an event could be edited, deleted or a new one inserted.

**\*Important note:** whilst at first glance event\_id looks as though it can be used to order each team’s match events chronologically, there are sometimes cases that after our analysts have reviewed each match, that the timestamp of the event can be tweaked. In which case this can knock the event\_id’s out of order (eg instead of event\_id**=”1”**, then event\_id**=”2”** and event\_id**=”3”**, it could change to event\_id**=”1”**, then event\_id**=”3”** and event\_id**=”2”**).

So please be aware that you should *always order events by the following attributes* (in this order):

* team\_id; then
* period\_id; then
* min; then
* sec; and then
* timestamp.

# Appendix 6 – how events are deleted

An example of a deleted event will look something like this in the feed:

<Event id=**"328486810"** event\_id=**"26"** type\_id=**"43"** period\_id=**"1"** min=**"4"** sec=**"8"** player\_id=**"2399"** team\_id=**"110"** outcome=**"1"** x=**"0.0"** y=**"0.0"** timestamp=**"2010-12-04T15:04:17.278"** last\_modified=**"2010-12-04T15:04:34"**>

<Q id=**"19756363"** qualifier\_id=**"56"** value=**"Back"** />

<Q id=**"371368182"** qualifier\_id=**"144"** value=**"50"** />

</Event>

Where type\_id**=”43”** describes this event as one that has been deleted from the game file.

qualifier\_id=**"144"** is used to inform you about the type of match action that was deleted, in this case value=**"50"** describes the deleted event as one that was a ‘dispossession’ event.

If you database each of the F24 match files that we send as the game progresses, when a deletion occurs, you will be able to search id**=”328486810”** from the previous F24 files you have received during the game.

You will then be able to locate the specific event from a previously delivered match file, which would have looked something like this:

<Event id=**"328486810"** event\_id=**"26"** type\_id=**"50"** period\_id=**"1"** min=**"3"** sec=**"37"** player\_id=**"2399"** team\_id=**"110"** outcome=**"1"** x=**"65.3"** y=**"2.7"** timestamp=**"2010-12-04T15:03:47.195"** last\_modified=**"2010-12-04T15:03:47"**>

<Q id=**"313977382"** qualifier\_id=**"56"** value=**"Right"** />

</Event>

\**This* *can only be achieved if you database each F24 match feed* as it is delivered live. If not and you allow each F24 match feed to be overwritten with every new delivery, then the only evidence that you will see that there was a deleted event is by the inclusion of the type\_id=**"43"** attribute.

**Notes:**

* Once we delete an event, the associated event’s data will be removed from the feed and so this will only be visible in the feeds that were produced before the event was deleted.
* The value of the event\_id=**""** attribute remains associated with its deleted event and the ascending count continues to increase in just the same way as if it were any other type\_id.
  + So for example, event\_id=**"1",** event\_id=**"2"** andevent\_id=**"3"** which could relate to pass, pass and pass might then become; pass, deleted event and pass.

# Appendix 7 – how events are edited/modified

We can edit events either live in-play or during our post-match data verification checks; these can be things such as slight player position changes in formations, or the official time of a goal adjusted by a couple of seconds etc.

To associate an event as being edited, we make use of the last\_modified attribute eg:

last\_modified=**"2010-12-04T15:03:47"**

By using this attribute, it allows you to avoid the situation whereby you’d be faced with having to parse every row of the feed each time a new file is delivered, in an attempt to make sure nothing had been edited.

Instead, by looking for the last\_modified attribute’s appearance only, this will allow you to parse just the new events that are delivered each time, safe in the knowledge that until this attribute is flagged up on your parser, that all previous information can be deemed as correct.

**Q id**

Whilst the id associated with the event does not change (eg Event id=**"316446219"**) in the occurrence of an edited event, the qualifiers – if modified – will be associated with new id value in the id attribute ie Q id=**"212475322"**

# Appendix 8 – outcome definitions

The below table highlights how to interpret the outcome=”0” and outcome=”1” attributes for their corresponding type\_id events:

|  |  |  |  |
| --- | --- | --- | --- |
| **Event ID** | **Name** | **Outcome 0** | **Outcome 1** |
| 1 | Pass | Unsuccessful pass ie pass did not find team mate | Successful pass |
| 2 | Offside Pass | Always set to "1" | |
| 3 | Take On | Unsuccessful – player lost possession or was tackled | Successful take on |
| 4 | Foul | Player that was fouled | Player who committed the foul |
| 5 | Out | The team that put the ball out | The team that therefore gained possession |
| 6 | Corner Awarded | The team that conceded the corner | The team that won the corner |
| 7 | Tackle | Unsuccessful attempted tackle/challenge from this team to the team on the ball ie other team retains possession after the challenge | Successful tackle ie challenging player wins possession of the ball from the other team |
| 8 | Interception | Always set to "1" | |
| 9 | Turnover | n/a | |
| 10 | Save | Always set to "1" | |
| 11 | Claim | Keeper drops the ball after an attempted catch from a cross. The keeper may then pick up the ball again and retain possession, but this would be a separate event | Keeper catches the cross in one attempt ie no drop |
| 12 | Clearance | Player clears ball from defence but possession switches to other team (not the same as player clearing ball out of play which is outcome="1") | Player clears ball from defence either to another team mate (ie possession retained) or straight out of play |
| 13 | Miss | Always set to "1" | |
| 14 | Post | Always set to "1" | |
| 15 | Attempt Saved | Always set to "1" | |
| 16 | Goal | Always set to "1" | |
| 17 | Card | Always set to "1" | |
| 18 | Player off | Always set to "1" | |
| 19 | Player on | Always set to "1" | |
| 20 | Player retired | Always set to "1" | |
| 21 | Player returns | Always set to "1" | |
| 22 | Player becomes goalkeeper | Always set to "1" | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Event ID** | **Name** | **Outcome 0** | **Outcome 1** |
| 23 | Goalkeeper becomes player | Always set to "1" | |
| 24 | Condition change | Always set to "1" | |
| 25 | Official change | Always set to "1" | |
| 27 | Start delay | Always set to "1" | |
| 28 | End delay | Always set to "1" | |
| 30 | End | Always set to "1" | |
| 32 | Start | Always set to "1" | |
| 34 | Team set up | Always set to "1" | |
| 35 | Player changed position | Always set to "1" | |
| 36 | Player changed Jersey number | Always set to "1" | |
| 37 | Collection End | Always set to "1" | |
| 38 | Temp\_Goal | Always set to "1" | |
| 39 | Temp\_Attempt | Always set to "1" | |
| 40 | Formation change | Always set to "1" | |
| 41 | Punch | Always set to "1" | |
| 42 | Good Skill | Always set to "1" | |
| 43 | Deleted event | Always set to "1" | |
| 44 | Aerial | Player lost aerial duel | Player won the aerial duel |
| 45 | Challenge | Always set to "0" ie a challenge by definition is unsuccessful and the player does not win the ball (by winning the ball this would be a tackle ie type\_id="7") | |
| 47 | Rescinded card | Always set to "1" | |
| 49 | Ball recovery | Always set to "1" | |
| 50 | Dispossessed | Always set to "1" | |
| 52 | Keeper pick-up | Always set to "1" | |
| 53 | Cross not claimed | Always set to "1" | |
| 54 | Smother | Always set to "1" | |
| 55 | Offside provoked | Always set to "1" | |
| 51 | Error | Always set to "1" | |
| 56 | Shield ball oop | Always set to "1" | |
| 57 | Foul throw in | Always set to "1" | |
| 58 | Penalty faced | Always set to "1" | |
| 59 | Keeper Sweeper | Goalkeeper comes off the line and clears ball but possession switches to other team (not the same as player clearing ball out of play which is outcome="1") | Goalkeeper comes off the line and either clears ball to another team mate (ie possession retained) or straight out of play |
| 60 | Chance missed | Always set to "0" | |
| 61 | Ball touch | Player unsuccessfully controlled the ball ie lost possession | Ball simply hit player unintentionally |
| 63 | Temp\_Save | Always set to "1" | |
| 64 | Resume | Always set to "1" | |
| 65 | CRD | Always set to "1" | |

# Appendix 9 – associated qualifiers

This table shows which qualifiers have appeared with the different event types throughout the production of F24. Whilst this list should not be taken as definitive, it does show the list of qualifiers that could reasonably be expected to appear with associated events. It serves as guidance but it is subject to change as more feeds are produced.

|  |  |
| --- | --- |
| **type\_id** | **qualifier\_id** |
| 1 | 1, 2, 4, 5, 6, 15, 22, 23, 24, 25, 26, 29, 31, 55, 56, 96, 97, 106, 107, 123, 124, 138, 140, 141, 154, 155, 156, 157, 160, 168, 195, 196, 198, 199, 210, 212, 213, 214, 218, 223, 224, 225 |
| 2 | 1, 2, 3, 4, 5, 6, 7, 8, 55, 56, 107, 123, 124, 140, 141 |
| 3 | 56, 211 |
| 4 | 9, 10, 11, 12, 13, 34, 40, 56, 95, 132, 184 |
| 5 | 56 |
| 6 | 56, 73, 219, 220, 221, 222 |
| 7 | 14, 56, 167 |
| 8 | 13, 14, 15, 31, 32, 56 |
| 9 | n/a |
| 10 | 1, 2, 9, 14, 15, 17, 21, 25, 29, 55, 56, 82, 88, 90, 91, 92,93, 94, 101, 102, 103, 137, 139, 173, 175, 176, 177, 178, 179, 180, 181, 182, 183, 190 |
| 11 | 1, 2, 56, 88 |
| 12 | 1, 2, 14, 15, 56, 91, 128, 167, 185 |
| 13 | 1, 2, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 55, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 96, 97, 100, 102, 103, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 133, 137, 146, 147, 153, 154, 160, 188, 214, 215 |
| 14 | 5, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 55, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 81, 96, 97, 102, 103, 108, 109, 111, 113, 114, 116, 117, 118, 119, 120, 121, 133, 146, 147, 154, 160, 214, 215 |
| 15 | 1, 2, 9, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 55, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 96, 97, 100, 101, 102, 103, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 133, 138, 139, 146, 147, 154, 160, 192, 214, 215 |
| 16 | 2, 9, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 40, 55, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 85, 86, 87, 96, 97, 102, 103, 108, 109, 110, 111, 113, 114, 117, 118, 119, 120, 121, 133, 136, 138, 146, 147 |
| 17 | 10, 11, 12, 13, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 56, 95, 132, 158, 159, 161, 162, 163, 164, 165, 166, 171, 172, 184, 191 |
| 18 | 41, 42, 44, 55, 59, 83, 227 |
| 19 | 41, 42, 44, 55, 59, 145, 227 |
| 20 | n/a |
| 21 | 145 |
| 22 | 44 |
| 23 | 44 |
| 24 | 45, 46, 47, 48, 49 |

|  |  |
| --- | --- |
| **type\_id** | **qualifier\_id** |
| 25 | 50, 51 |
| 27 | 41, 53, 200, 201, 202, 203, 204, 205, 206, 207, 208 |
| 28 | n/a |
| 30 | 54, 57, 209, 226, 227 |
| 32 | 127 |
| 34 | 30, 44, 59, 130, 131, 194, 197, 227 |
| 35 | 44 |
| 36 | 59 |
| 37 | 229 |
| 38 | 9, 16, 17, 18, 19, 22, 26, 56, 60, 61, 62, 63, 64, 65, 66, 69, 70, 71 |
| 39 | 9, 16, 17, 18, 19, 20, 22, 26, 56, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71 |
| 40 | 30, 44, 59, 130, 131, 227 |
| 41 | 56 |
| 42 | 56 |
| 43 | n/a |
| 44 | 9, 13, 55, 56 |
| 45 | 31, 56 |
| 47 | 13, 31, 32, 33, 34 |
| 49 | 14, 56 |
| 50 | 56 |
| 51 | 169, 170 |
| 52 | n/a |
| 53 | n/a |
| 54 | n/a |
| 55 | n/a |
| 56 | 56 |
| 57 | 56 |
| 58 | 9, 56, 73, 75, 138, 178, 179, 186, 187, 188 |
| 59 | 56 |
| 60 | 55, 56, 154 |
| 61 | 56, 138, 228 |
| 63 | 56, 173, 178, 182 |
| 64 | n/a |
| 65 | None available yet - new stat in 2012/13 |

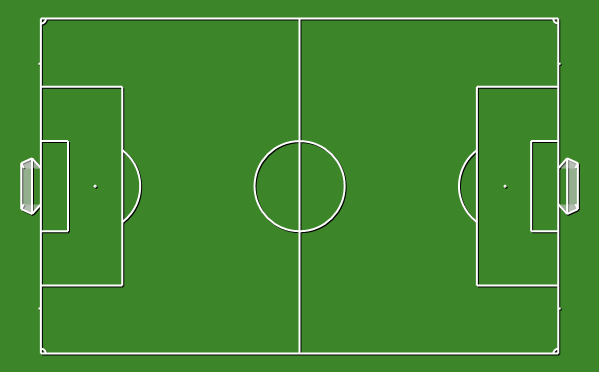
# Appendix 10 – period ID list

Below are the period ID values that appear with the period=”” attribute in the <Event> tag:

|  |  |
| --- | --- |
| **Period** | **Period\_id** |
| Pre game | 15 |
| Pre match | 16 |
| Post game | 14 |
| First half | 1 |
| First half ends | 10 |
| Second half | 2 |
| Second half ends | 11 |
| First period of extra time | 3 |
| First period of extra time ends | 12 |
| Second period of extra time | 4 |
| Second period of extra time ends | 13 |
| Penalty shoot out | 5 |

# Appendix 11 – pitch co-ordinates and direction of play

This is based on the direction of attack always being from left to right on the x-axis, regardless of the team or period of the game, the defending goal line is always where x=0 and the attacking where x=100. All measurements for events given in the feed should therefore be taken in relation to percentages.



0, 78.9

17, 78.9

17, 21.1

0, 21.1

5.8, 36.8

5.8, 63.2

11.5, 50

50, 50

100, 21.1

83, 21.1

83, 78.9

100, 78.9

94.2, 36.8

94.2, 63.2

88.5, 50

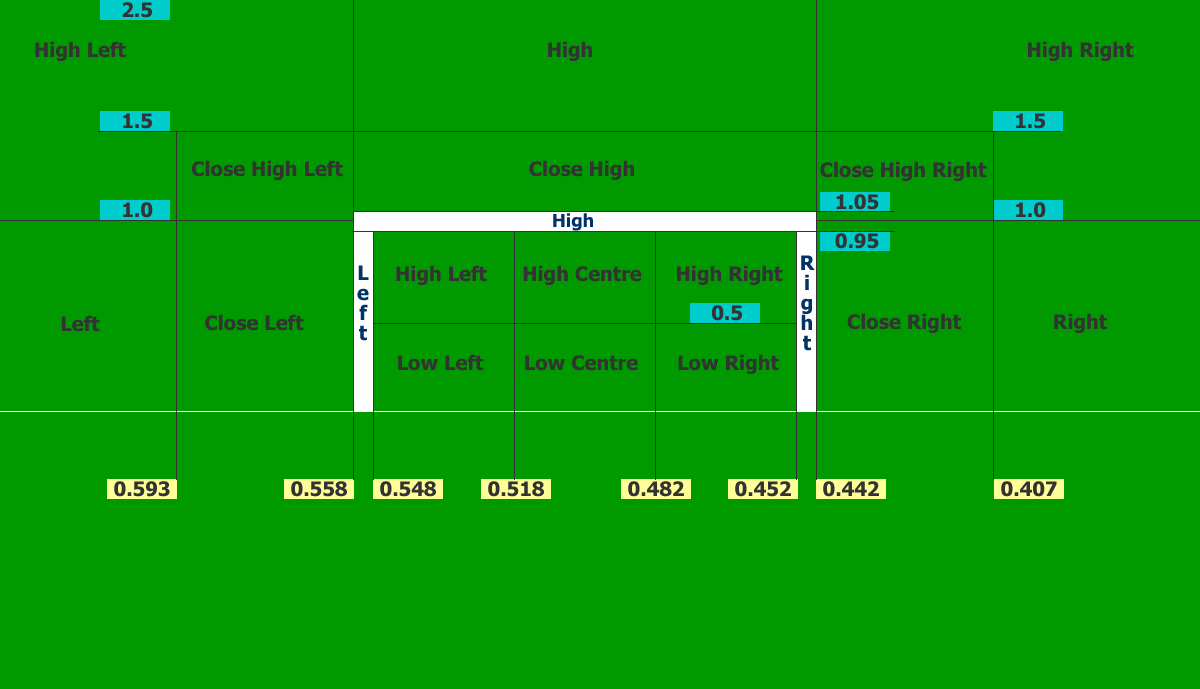
0, 100

0, 0

100, 100

100, 0

# Appendix 12 – goalmouth co-ordinates



**20.0**

**40.0**

**40.0**

**38.0**

**60.0**

**60.0**

**100**

**59.3**

**55.8**

**51.8**

**48.2**

**45.2**

**44.2**

**40.7**

**54.8**

**100**

**42.0**

**EVENT - Goal, Attempt Saved:**

|  |  |  |
| --- | --- | --- |
| **Qualifier** | **end\_y** | **end\_z** |
| Low Left | (51.8 <= end\_y <= 54.8) | (0 <= end\_z <= 20) |
| High Left | (51.8 <= end\_y <= 54.8) | (20 <= end\_z <= 38) |
| Low Centre | (48.2 <= end\_y <= 51.8) | (0 <= end\_z <= 20) |
| High Centre | (48.2 <= end\_y <= 51.8) | (20 <= end\_z <= 38) |
| Low Right | (45.2 <= end\_y <= 48.2) | (0 <= end\_z <= 20) |
| High Right | (45.2 <= end\_y <= 48.2) | (20 <= end\_z <= 38) |

**EVENT - Post:**

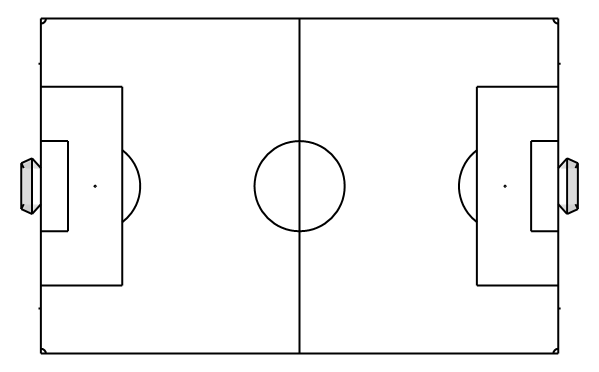
|  |  |  |
| --- | --- | --- |
| **Qualifier** | **end\_y** | **end\_z** |
| Left | (54.8 <= end\_y <= 55.8) | (0 <= end\_z <= 38) |
| High | (44.2 <= end\_y <= 55.8) | (38 <= end\_z <= 42) |
| Right | (44.2 <= end\_y <= 45.2) | (0 <= end\_z <= 38) |

**EVENT - Miss:**

|  |  |  |
| --- | --- | --- |
| **Qualifier** | **end\_y** | **end\_z** |
| Close Left | (55.8 <= end\_y <= 59.3) | (0 <= end\_z <= 40) |
| Close High Left | (55.8 <= end\_y <= 59.3) | (40 <= end\_z <= 60) |
| Close Right | (40.7 <= end\_y <= 44.2) | (0 <= end\_z <= 40) |
| Close High Right | (40.7 <= end\_y <= 44.2) | (40 <= end\_z <= 60) |
| Close High | (44.2 <= end\_y <= 55.8) | (42 <= end\_z <= 60) |
| Left | (59.3 <= end\_y <= 100) | (0 <= end\_z <= 40) |
| Right | (0 <= end\_y <= 40.7) | (0 <= end\_z <= 40) |
| HighLeft | (55.8 <= end\_y <= 100) | (60 <= end\_z <= 100) |
| HighRight | (0 <= end\_y <= 44.2) | (60 <= end\_z <= 100) |
| High | (44.2 <= end\_y <= 55.8) | (60 <= end\_z <= 100) |

# Appendix 13 – pitch zones

When Qualifier 56 is shown with an event it will also display a value which can be right, left, centre or back. The diagram below highlights what these zones are on the pitch.



**Back**

**Zone**

**Centre Zone**

**Right Zone**

**Left Zone**

**19 –**

**35+ Centre**

**70 –**

**35+ Right**

**71-**

**35+ Left**

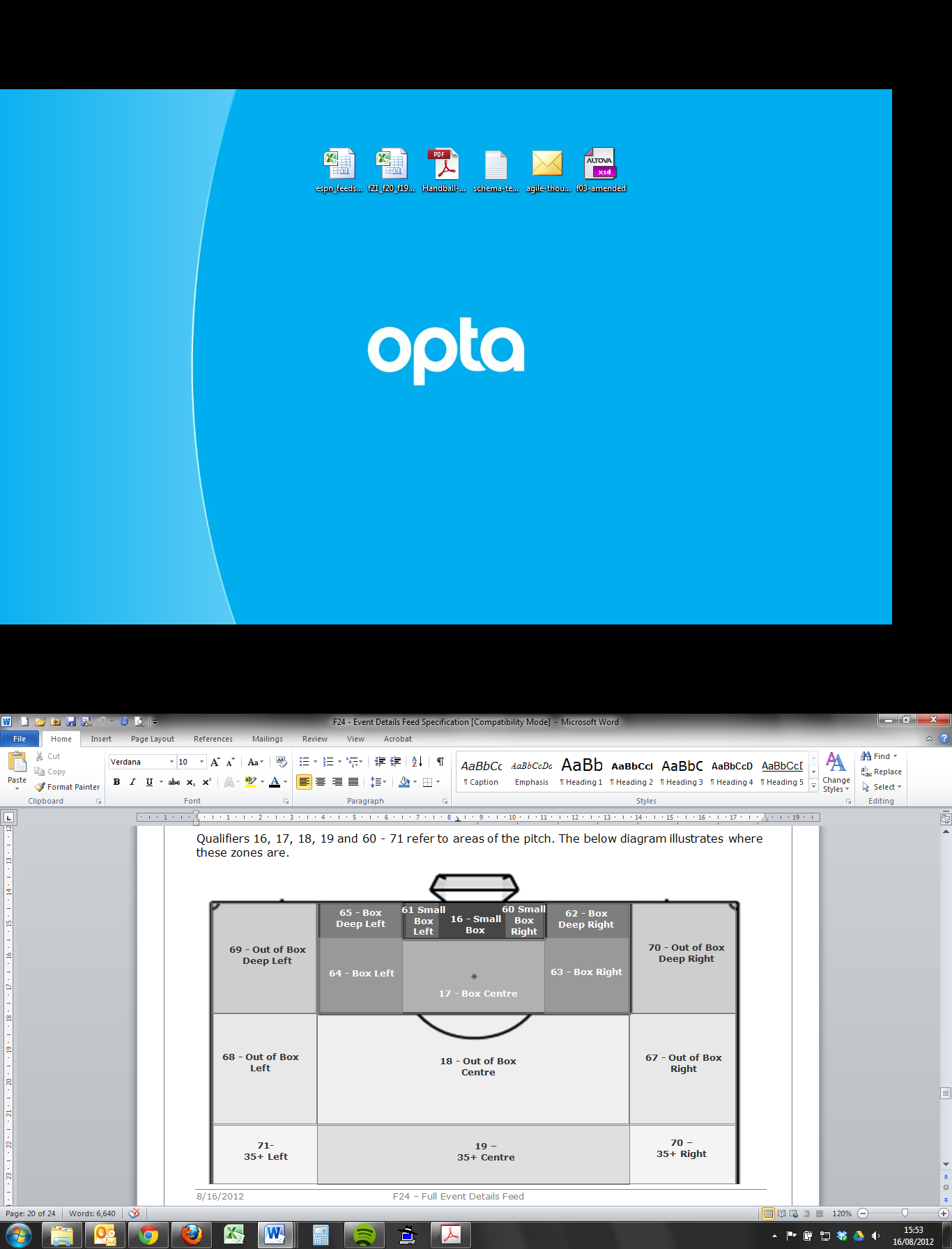
Qualifiers 16, 17, 18, 19 and 60 - 71 refer to areas of the pitch. The below diagram illustrates where these zones are.

**17 - Box Centre**

**18 - Out of Box**

**Centre**

**17 - Box Centre**



**Appendix 14 - playing positions**

# When Event 34 is shown it will include Qualifier 30, 130 and 131.

* 130 will indicate the formation the team will be playing in
* 30 will list the players
* 131 will list the playing positions

The order that the players are listed in qualifier 30 will be the same order as the positions listed on qualifier 131. For example:

<Q id=**"1998281501"** qualifier\_id=**"130"** value=**"8"** />

<Q id=**"193244804"** qualifier\_id=**"30"** value=**"59936, 37748, 42427, 8758, 17127, 51507, 20467, 21091, 12297, 41792, 43274, 8597, 57214, 81880, 37096, 13227, 56861, 15675"** />

<Q id=**"280405493"** qualifier\_id=**"131"** value=**"1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 0, 0, 0, 0, 0, 0, 0"** />

With regards to the qualifier id 130 (ie formation), this can be interpreted as the team playing in a 4231 formation which is depicted below from formation number 8.

For line ups using qualifier id’s 130 and 131 in conjunction, you can see for example that position 1 will be player 59936 and position 7 will be 20467. Where position = 0, this relates to a substitute for which we do not current record the exact playing position.

The diagrams overleaf show all of the possible formation numbers and the layout of players in this formation – *note that team formation #1 is not used.*

**Player Layout**

The players are laid out in right to left, defense to forwards. Therefore if a team has been assigned a 442 formation; the player tagged 2 will be right back, 3 right centre back, 4 left centre back, 5 left back, 6 right midfield, 7 right centre midfield, 8 left centre midfield, 9 left midfield, 10 right centre forward, 11 left centre forward.

**Team Formation 2 – 442:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | **1** | |  | |
| **2** | **5** | | **6** | | **3** |
| **7** | **4** | | **8** | | **11** |
|  | **10** | | **9** | |  |

**Team Formation 3 – 41212 (Diamond):**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | **1** | |  | |
| **2** | **5** | | **6** | | **3** |
|  | | **4** | |  | |
| **7** | |  | | **11** | |
|  | | **8** | |  | |
|  | **10** | | **9** | |  |

**Team Formation 4 – 433:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | **1** | |  | |
| **2** | **5** | | **6** | | **3** |
| **7** | | **4** | | **8** | |
| **10** | | **9** | | **11** | |

**Team Formation 5 – 451:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1** | | | | | |  | |
| **2** | **5** | | | **6** | | | | 3 |
| **7** | | **4** | | **8** | | 11 | | |
|  | **10** | |  |
|  | | | **9** | |  | | | |

**Team Formation 6 – 4411:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1** | | | |  |
| **2** | **5** | | **6** | | **3** |
| **7** | **4** | | **8** | | **11** |
|  | | **10** | |  | |
| **9** | |

**Team Formation 7 – 4141:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1** | | | |  |
| **2** | **5** | | **6** | | 3 |
|  | | **4** | |  | |
| **7** | **8** | | **10** | | 11 |
|  | | **9** | |  | |

**Team Formation 8 – 4231:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
| **2** | | **5** | | | **6** | | | **3** | |
|  | | **8** | | | **4** | | |  | |
|  | **7** | | | **10** | | **11** | | |  |
|  | | | **9** | | | |  | | |

**Team Formation 9 – 4321:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
| **2** | | **5** | | | **6** | | | **3** | |
|  | **8** | | | **4** | | **7** | | |  |
|  | | **10** | | | **11** | | |  | |
|  | | | **9** | | | |  | | |

**Team Formation 10 – 532:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
| **2** | **6** | | | **5** | | **4** | | | **3** |
|  | **7** | | | **8** | | **11** | | |  |
|  | | **10** | | | **9** | | |  | |

**Team Formation 11 – 541:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
| **2** | | **6** | | **5** | | **4** | | **3** | |
|  | **7** | | **8** | | **10** | | **11** | |  |
|  | | | **9** | | | |  | | |

**Team Formation 12 – 352:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | **1** | | | |  | | | | |
|  | **6** | | | **5** | | | | | | **4** | | |  |
| **2** | | **7** | | | | | **8** | | | | | **3** | |
|  | | | | **11** | |  | | | |
|  | | | **10** | | | | **9** | | | |  | | |

**Team Formation 13 – 343:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
|  | **6** | | | **5** | | **4** | | |  |
| **2** | | **7** | | | **8** | | | **3** | |
|  | **10** | | | **9** | | **11** | | |  |

**Team Formation 14 – 31312**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | |  | | |
|  | **6** | | | **5** | | **7** | | |  |
|  | | | **4** | | | |  | | |
|  | **2** | | | **8** | | **3** | | |  |
|  | | | **10** | | | |  | | |
|  | | **9** | | | **11** | | |  | |

**Team Formation 15 – 4222:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **1** | |  |
| **2** | **5** | **6** | **3** |
|  | **4** | **7** |  |
| **8** | **11** |
| **10** | **9** |

**Team Formation 16 – 3511:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **1** | | | | |  | | | |
|  | **6** | | **5** | | | | | | | **4** | |  |
| **2** | | **7** | | | | | **8** | | | | **3** | |
|  | | | | **11** | |  | | |
|  | | | | | **10** | | |  | | | | |
|  | | | | | **9** | | |  | | | | |

**Team Formation 17 – 3421:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | | | | |  | | | |
|  | | **6** | | | **5** | | | **4** | | |  | | |
| **2** | | **7** | | | | **8** | | | | | | **3** | |
|  | **10** | | | | | | **9** | | | | | |  |
|  | | | | **11** | | | | |  | | | | |

**Team Formation 18 – 3412:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **1** | | | | | | |  | | | |
|  | | **6** | | | **5** | | | **4** | | |  | | |
| **2** | | **7** | | | | **8** | | | | | | **3** | |
|  | | | | **9** | | | | |  | | | | |
|  | **10** | | | | | | **11** | | | | | |  |