

The Sports Data Query Language Manual for the NBA

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INTRODUCTION

This document describes how to use the Sports Data Query Language (SDQL), to perform serious research on the NBA over the internet. After years of development and optimization and re-optimization, the language is ready for the public.

Users will be able to isolate billions upon billions of interesting situations using simply query text language. It will take a small time investment to learn the format of the queries, but the result will be the best access to NBA results available.

The first chapter in this manual goes over some of the most popular query parameters. The second chapter gives a listing of the prefixes that can be used with these parameters. The third chapter describes how to compare parameters and the fourth describes how to multiply and divide parameters to access more handicapping situations. Chapter five describes how to use averages and Chapter six presents the “Search All” feature, a powerful technique that saves a tremendous amount of time.

As you learn how to utilize the database, you will become more and more fluent and more and more powerful, even inventing your own queries.

There is a Google Group that is monitored by expert users. Here you can post questions and interesting queries. A link to the Google Group can be found at the bottom of the query pages at KillerSports.com and the website is given below.

<http://www.groups.google.com/group/SportsDataBase>

If you become a skilled user and an expert handicapper, you can apply to post your selections on KillerCappers.com, an affiliate of KillerSports.com.

Enjoy!

The Sports Data Query Language Development team

Using the Sports Data Query Language (SDQL)

There are a number of sites where you can perform research using the Sports Data Query Language. We will use the website KillerSports.com to present examples. To get to the NBA Text Query page, go to KillerSports.com and click on NBA in the horizontal menu bar that is just under the KillerSports.com logo. Now click on “Advanced Text Query Page.”

Here you will see a long horizontal bar in which you can type your own queries – somewhat similar to Google.

There is a default query that will appear in the box. It is:

team and season=2007

This query has two parameters. They are “team” and “season.” The season is set to 2007, but the team is not set to anything. When a parameter is not set, The Sports Data Query Language (SDQL) will return all possible parameter values. So, when the “team” is not set equal to a particular team (e.g., team=Bulls), the computer returns the results for ALL teams. This is a very handy feature and makes searching the database much more efficient.

Before we move on, let’s examine the results for this simple query. Note that the teams are ranked by ATS record. This is shown in the “ATS” column. In fact, the teams can be ranked by any column simply by clicking on the top of the column. For example, to see which teams have been “over” teams, click on the blue “OU” and KillerSports.com will rank the teams OU record. The same thing is true of the “SU” column.

Note that the team names in the “Team” column are links. Click on them to the team’s individual game listing for 2007.

This output format is the standard query output format used at KillerSports.com. Here you can see the records, a statistical summary of the games, and an individual game listing with lines and results for each game.

The KillerSports.com Query Output File

The standard query output file at KillerSports.com is shown below. The query is for the trend: The Pacers are 0-21 ATS (-11.3 ppg) since November 23, 2000 as a favorite with at least one day of rest after a game in which their opponent shot at least ten three-pointers and made at least half of them.

NBA Query

t:team=Pacers and playoffs=0 and line<0 and 0<rest and p:season=season and 10<=po:three pointers attempted and 50<=po:three pointer percentage and po:season=season and 20001123<=date

SU: 5-16 (-5.2)
ATS: 0-21-0 (-11.3) avg line: -6.1
OU: 11-10-0 (-2.0) avg total: 190.4

Score	Field Goals	Threes	Free Throws	Blocks	O Rbnds	Rbnds	Fouls	Assists	TrnOvrs
Team: 91.6	33.3-77.2 (43.4%)	5.6-16.9 (33.2%)	19.4-25.2 (76.5%)	5.6	11.8	41.3	23.5	20.5	16.1
Opp: 96.8	35.8-78.7 (45.6%)	5.6-13.6 (40.7%)	19.5-25.9 (74.7%)	6.1	12.1	42.1	22.8	21.6	15.3

Date	Team	Opp	Site	Final	Rest	FG%	Line	Total	SUm	ATSm	OUm	DPS	DPA	SUr	ATSr	OUr	ot
20001123	Pacers	Raptors	home	91-111	1&2	45-48	-3'	+188	-20	-23.5	14.0	-4.8	18.8	L	L	O	
20001130	Pacers	Warriors	away	95-99	1&0	41-47	-4	+188	-4	-8.0	6.0	-1.0	7.0	L	L	O	
20020118	Pacers	Pistons	home	93-96	1&2	53-47	-4	+192'	-3	-7.0	-3.5	-5.2	1.8	L	L	U	
20020212	Pacers	Jazz	home	82-98	6&6	41-44	-2'	+190	-16	-18.5	-10.0	-14.2	4.2	L	L	U	
20021206	Pacers	Suns	away	96-102	1&1	48-51	-2'	+181'	-6	-8.5	16.5	4.0	12.5	L	L	O	
20030311	Pacers	Hornets	home	71-81	1&1	36-40	-4	+190	-10	-14.0	-38.0	-26.0	-12.0	L	L	U	
20030326	Pacers	Seventysixers	home	85-91	3&2	48-44	-3	+188'	-6	-9.0	-12.5	-10.8	-1.8	L	L	U	
20030411	Pacers	Magic	home	86-98	2&1	40-37	-7	+199	-12	-19.0	-15.0	-17.0	2.0	L	L	U	
20041117	Pacers	Hawks	home	93-86	3&0	45-42	-14	+188'	7	-7.0	-9.5	-8.2	-1.2	W	L	U	
20050202	Pacers	Raptors	home	97-98	1&2	37-41	-7	+185'	-1	-8.0	9.5	0.8	8.8	L	L	O	
20050209	Pacers	Bobcats	home	94-87	1&0	48-40	-12	+185'	7	-5.0	-4.5	-4.8	0.2	W	L	U	
20051118	Pacers	Bobcats	home	93-85	1&1	41-37	-14	+194'	8	-6.0	-16.5	-11.2	-5.2	W	L	U	
20051214	Pacers	Celtics	away	71-85	3&3	32-45	-3	+186'	-14	-17.0	-30.5	-23.8	-6.8	L	L	U	
20060118	Pacers	Bobcats	home	98-92	1&1	50-48	-9'	+187'	6	-3.5	2.5	-0.5	3.0	W	L	O	
20060414	Pacers	Timberwolves	home	89-77	1&1	45-43	-13	+174	12	-1.0	-8.0	-4.5	-3.5	W	L	U	
20061117	Pacers	Nets	home	91-100	1&1	43-45	-5	+187	-9	-14.0	4.0	-5.0	9.0	L	L	O	
20061217	Pacers	Jazz	home	94-104	1&1	36-46	-2	+195	-10	-12.0	3.0	-4.5	7.5	L	L	O	
20070207	Pacers	Supersonics	home	102-103	1&1	39-55	-7'	+204	-1	-8.5	1.0	-3.8	4.8	L	L	O	
20070225	Pacers	Kings	home	93-110	1&1	38-45	-5	+202	-17	-22.0	1.0	-10.5	11.5	L	L	O	
20070415	Pacers	Nets	home	107-111	1&1	46-51	-5	+191'	-4	-9.0	26.5	8.8	17.8	L	L	O	
20070417	Pacers	Hawks	away	102-118	1&0	49-53	-1'	+199	-16	-17.5	21.0	1.8	19.2	L	L	O	

The NBA Query output file offers a records summary with average margins, a statistical summary with shooting percentages, etc. and a complete game listing of all the games that make up the trend.

Chapter One – THE PARAMETER LISTING

A listing of all the teams games is useful, but handicappers would like to know how a team performs in certain situations. To query these situations, KillerSports.com offers numerous parameters that will allow users to query billions of handicapping situations.

Below is a listing of the most commonly used parameters. The listing is updated frequently. For a complete listing, go to the bottom of the NBA Advanced Query Text Page at KillerSports.com. The power of KillerSports.com comes from the manner in which these parameters can be combined to produce a tremendous variety of queries that are impossible to perform anywhere else. The sample queries shown with each parameter are very simplistic and are given merely to define the parameter, not to give an example of a useful query. When game references are put on the parameters and the parameters are combined, the true power of KillerSports.com can be realized. One customer said, “With the SDQL, only the tiniest fraction of a percent of the possible queries have ever been performed.” Examples of these powerful queries will be given in subsequent chapters.

assists – This is the number of assists a team had for a game.

Sample Query: assists>20

ats margin – This is the margin by which a team covered or failed to cover the spread. For example, if a four-point favorite wins by ten points, their ATS Margin is +6. If the four-point favorite loses by three points their ATS Margin is -7 points.

Sample Query: ats margin <=-10

biggest lead – This is the biggest lead a team had anytime during the game.

Sample Query: biggest lead=0

blocks – This is the number of times a team blocked an opponent’s shot during a game

Sample Query: blocks>=10

conference – There are two conferences in the NBA, the Eastern conference and the Western

Conference. The two possible values of this parameter are Eastern and Western.

Sample Query: o:Conference=Western

date - This is the date in eight-digit format. This is useful for setting a search-from date, for a recently emerging trend or system. June 10th 2006 is represented as 20060610.

Sample query: date>20050804

day - This is the day of the week. The day must be spelled out completely with the first letter capitalized. This is useful to uncover how teams perform on a particular day of the week.

Sample query: day=Friday

defensive rebounds – This is the total number of times a team controlled one of their opponent’s missed shots.

Sample query: defensive rebounds>30

division – There are six divisions in the NBA, two from each conference. The Eastern conference houses the Atlantic, the Southeast and the

Sample query: division=

dpa – This stands for Delta Points Allowed. It is the difference between the points the team was expected to allow and the number of points they actually allowed. For example, a team that is favored by 8 points in a game that has an OU line of 200, is expected to win by a margin of 104-96. That is, they are expected score 104 points and to allow 96 points. If they win by a margin of 110-90, their dpa is minus 6 points. This means that they allowed 6 points fewer than expected.

Sample Query: dpa>=10

dps - This stands for Delta Points Scored. It is the difference between the points the team was expected to score and the number of points they actually scored. For example, a team that is favored by 6 points in a game that has an OU line of 190, is expected to win by a margin of 98-92. That is, they are expected score 98 points and to allow 92 points. If they win by a margin of 103-102, their dps is plus 5 points. This means that they scored 5 points more than expected.

Sample Query: dps>=10

fast break points – This is the number of points a team scored in a game while on a fast break.

Sample Query: fast break points>=20

field goal percentage – This is the team's field goal percentage for a game. It is the number of field goals made divided by the total number of field goals attempted times 100%.

Sample Query: field goal percentage>=55

field goals attempted - This is the number of field goals attempted by a team in a game.

Sample Query: field goals attempted>=85

field goals made – This is the total number of field goals made by a team in a game.

Sample Query: field goals>40

first half points – This is the total number of points a team scores in the first half.

Sample Query: first half points<40

first quarter points – This is the total number of points a team scores in the first quarter.

Sample Query: first quarter points>=30

fouls – This is the total number of personal fouls called on a team in a game.

Sample Query: fouls>30

fourth quarter points - This is the total number of points a team scores in the fourth quarter.

Sample Query: fourth quarter points><20

free throw percentage – This is the percentage of free throws a team made for a game. It is the number of free throws made divided by the total number of free throws attempted times 100%.

Sample Query: free throw percentage<60

free throws attempted - This is the number of free throws attempted by a team in a game.

Sample Query: free throws attempted>=35

free throws made – This is the total number of free throws made by a team in a game.

Sample Query: free throws made >30

line – This is the Vegas line for the game. If the team is favored, their line is negative. The line in the database is neither the opening line or the closing line. It is the line at which most people bet the game.

Sample Query: line <=-3

margin – This is the margin by which a team won or lost the game. If a team won the game by seven points, their margin is plus seven.

Sample Query: margin>=10

margin after the first - This is the margin at the end of the first quarter. If the game is tied, the margin is zero.

Sample Query: margin after the first = 0

margin after the third - This is the margin at the end of the third quarter.

Sample Query: margin after the third <= -20

margin at the half - This is the margin at halftime.

Sample Query: margin at the half >=10

minutes – This is the number of minutes played by a particular player. For more on player-based queries, see the Chapter titled, “Player-Based Queries.”

Sample Query: 45 < Bulls:Luol Deng:minutes

month – This parameter can be used to look at a particular month, or a range of months. The values of the parameter are the number of the month 1-12.

Sample Query: month = 11

offensive rebounds – This is the total number of times a team controlled one of their own missed shots.

Sample query: offensive rebounds >30

ou margin – This is the margin by which a game went over or under the vegas OU line.

Sample Query: ou margin >=20

overtime – This is the number of overtime periods in a game. If the game did not go into overtime, the value is zero.

Sample Query: overtime=2

playoffs – This parameter can be used to isolate or eliminate playoffs games. To include only playoff games, set playoffs=1 and to eliminate playoff games, set playoffs=0.

Sample Query: playoffs=0

points – This is the total number of points a team scored in a game.

Sample Query: points >=100

points in the paint – This is the total number of points scored close to the basket, as determined by the official scorer.

Sample Query: points in the paint >=30

rebounds – This is the total number of rebounds controlled by a team.

rest – This is the number of days off a team has between games. If a team plays on consecutive days, their rest is zero.

Sample Query: rest >=2

season – This is the four-digit year of the season.

Sample Query: season >= 2002

second quarter points This is the total number of points a team scores in the second quarter.

Sample Query: second quarter points <=15

shooting percentage – This is the same as field goal percentage. It is the percentage of shots from the field that were successful.

Sample Query: shooting percentage <35

site – This parameter has two values – home and away. It is the site where the game is played for the team.

Sample Query: site=home

steals – This is the number of times a team stole the ball from their opponent in a game.

Sample Query: steals >=12

team – This identifies the team. The names of the teams are used – not the city that the team is from.

Sample Query: team=Cavaliers

team rebounds – A team is assigned a team rebound when an opponent’s shot goes out of

bound or when their opponent misses a free throw(!). This is the total number of team rebounds for the team in a game.

Sample Query: team rebounds >=15

third quarter points – This is the total number of points a team scored in the third quarter for the game in question.

Sample Query: third quarter points<=15

three pointer percentage – This is the percentage of three point attempts that were successful for a game.

Sample Query: Three pointer percentage>=50

three pointers attempted – This is the total number of three pointers attempted for a game.

Sample Query: three pointers attempted >=20

three pointers made – This is the total number of three pointers a team made in a game.

Sample Query: three pointers made >=10

total – This is the Vegas line for the total number of points scored in the game.

Sample Query: total>=200

turnovers – This is the number of turnovers a team committed for the entire game.

Sample Query: turnovers>=20

Free Query of the Day at
KillerCappers.com



The Shortcuts

KillerSports.com uses single capital letters for commonly used queries. They are:

H A W L F D C

The H is for home, the A is for away, the W is for win, the L is for loss, the F is for favorite, the D is for dog and the C is for conference.

So, to see how a team does as a road dog when they are off a loss as a home favorite, you can type:

site = away and line > 0 and p:margin<0 and p:site=home and p:line<0

Or you can use the shortcuts and type:

AD and p:LHF

Clearly, this saves a lot of wear and tear on both the keyboard and your wrists. As you become a skilled user of the site, you will use the shortcuts more and more.

For example, to query the situation when a team is a home favorite off a win that broke at least a three game losing streak, use:

HF and p:W and pp:L and ppp:L and pppp:L

Or, to investigate how NBA teams do when they are a home dog off two consecutive losses as a road favorite, use:

HD and p:LAF and pp:LAF

Or, uncover how teams do when they are a home favorite when the team lost on the as a road dog in their last two games, use:

HF and p:DAL and pp:DAL

Or, how teams do when they are a home underdog when they lost their last two games vs this opponent

HD and P:L and PP:L

All of the previous shortcuts did not need to be assigned a value. That is, H means home, A means away etc.

There are other shortcuts that need to be assigned a value of a range of values. For example, instead of typing "free throws attempted" you can type FTA. So to query games in which the team attempted at least forty free throws, you can use:

free throws attempted >= 40

or, equivalently,

$$\text{FTA} \geq 40$$

A complete list of these types of abbreviations are given below:

FGA - field goals attempted
FGM - field goals made
FTA - free throws attempted
FTM - free throws made
TPA - three pointers attempted
TPM - three pointers made
TO - turnovers
AST - assists

M1 - margin after the first
M2 - margin at the half
M3 - margin after the third

P1 – points scored in the first
P2 – points scored in the second
P3 – points scored in the third
P4 – points scored in the fourth

FGP - field goal percentage
TPP - three point percentage
FTP - free throw percentage

PFT - percentage of points from free throws
PTP - percentage of points from three pointers
WP - team winning percentage

The first four groups in this listing are all previously defined parameters. That is, they are shortcuts for parameters that are already given in the glossary. These require no further explanation. The last three are new.

The first is PFT, the percentage of a team's total points that are from free throws. This is the shortcut for the following query text:

$$\text{free throws made} * 100.0 / \text{points}$$

That is, the query:

$$\text{free throws made} * 100.0 / \text{points} \geq 30$$

is equivalent to:

$$\text{PFT} \geq 30$$

Similarly, the percentage of a team's total points from three pointers can be calculated using:

$$\text{three pointers made} * 100.0 / \text{points} \geq 30$$

is equivalent to:

$$\text{PTP} \geq 30$$

Finally, one of the most useful parameters is WP, the winning percentage. This is the team's season-to-date win percentage. If a team is 22-22 on the season, they have a WP of 50. As we'll see in the next chapter, ALL of these parameters can be assigned to the opponent, as well as the team. In addition, they can be assigned to any number of games into the past or into the future. They can also be assigned to the last time the team faced their opponent. For example, when a team is seeking revenge for a loss in which they missed at least ten free throws, or when a team is an underdog to a team that has a worse record. Let's move on to the parameter prefixes.

Chapter Two – THE GAME REFERENCES p, P, o and n

Introduction

The default game reference for a given parameter is the current game. That is, setting;

$$\text{points} \geq 100$$

will return all the games in which the team scored 100+ points. Similarly,

$$\text{points} \geq 100 \text{ and L}$$

will return all games in which a team scored more than 100 points and lost.

When handicapping, it is useful to see how a team responds in a particular set of circumstances that involve recent results. For example, when they were scored 100+ points and lost, when they committed 20+ turnovers, or when less than 40% of their baskets were assisted. Out last week or when they scored 30 points and lost last week. To access games in the past and in the future, KillerSports.com uses prefixes in front of the parameter that is called the game reference. The game references are separated from the parameter by a colon. Any number of game references can be strung together. In this chapter, each of the four main game references will be introduced with numerous examples of each.

2.1 The Team's Previous Game – p:

The lower case "p" refers the parameter back to the team's previous game. It can go in front of any parameter in the parameter listing and it must be separated from the parameter by a colon.

For example, to see how the Celtics do when they are off a loss as a home favorite in a game that was tied at the end of the third quarter, use:

team = Celtics and p:M3=0 and p:LHF

To see how the league performs in the second of back-to-back road games when they lost the first in overtime, use:

A and p:AL and p:overtime>0 and rest=0

To see how the league performs in the after a double-overtime loss, use:

p:L and p:overtime=2

To see how the Cavs perform as a road dog after a double-digit win in which they shot 50%+ from the use:

team=Cavs and AD and p:margin>=10 and p:field goal percentage>=50

To see how the Pistons do as an underdog after a loss in which they were ahead at the end of each of the first three quarters, use:

team=Pistons and D and p:M1<0 and p:M2<0 and p:M3<0 and p:W

Note that if no team is assigned, the SDQL automatically returns the result for the entire league as a whole. So, to find league-wide systems, just don't use the team parameter. For example, to see how NBA teams as a favorite during the regular season after a double-digit road loss in which they shot at least ten three-pointers and made at least half of them, use:

F and playoffs=0 and p:margin<=-10 and p:A and p:TPA>=10 and p:TPP>=50

The second previous game can be accessed simply by adding another p in the prefix. For example, to see how the league performs when they shot better than 50% from the field in each of their last two games , use:

p:FGP>=50 and pp:FGP>=50

Note that the order of the parameters is irrelevant. That is:

pp:FGP>=50 and p:FGP>=50

returns the same results as the previous example. As long as the parameters are properly formatted and are strung together with "and" between them, your query should work.

There is no limit to the number of p's that can be strung together. For example, to see how the Hawks perform when they have committed fewer than 12 turnovers for three straight games, use the following query.

p:TO<12 and pp:TO<12 and ppp:TO<12 and team=Hawks

Also, to see how the Clippers perform off at home off a loss that broke at least a four game winning streak, use:

p:L and pp:W and ppp:W and pppp:W and ppppp:W and team=Clippers and H

To see how the Warriors perform when they are playing their fourth game in five days, use:

team=Warriors and p:rest=0 and pp:rest=1 and ppp:rest=0

To see how the Wizards perform when they are off a loss in which they scored fewer than 20 points in the fourth quarter, use:

team=Wizards and p:P4<20 and p:L

2.2 The Team's Previous Game vs Opponent – P:

When the “P” is capitalized, the parameter is referred back to the last time the team faced their current opponent. This parameter's most obvious use is for revenge situations. The simple query:

P:L

returns all the game in which the team lost vs their current opponent in their previous match-up. If you want to see the results for a home team that is seeking revenge for a road loss, use:

H and P:AL

Sometimes, we would like the revenge to be only from the current season. To do this, simply ADD the condition:

P:season = season

That is, the season of the previous game is the same as the current season. When the season of the previous match-up is equal to the season, the team is seeking same-season revenge.

We can also look at teams seeking revenge for a loss from last season. This is done with the following query text:

P:season+1 = season and P:L

we can further stipulate whether the previous-season revenge is for a double-digit loss as a favorite.

P:season+1 = season and P:margin<=-10 and P:F

In fact, ANY parameter can be “pointed” to the last time the teams faced each other. For example, when a team is seeking revenge for a loss in which they shot less than 40% from the field, less than 60% from the line and committed 20+ turnovers. The query text is as follows:

P:L and P:FGP<40 and P:FTP<60 and P:TO>=20

2.3 The opponent – o:

The “o” game reference assigns the parameter to the team’s opponent. For example, if you would like to see how the Mavs have done against the Suns, use the following query text:

team = Mavericks and o:team=Suns

With the o:prefix, you can investigate the situation when a team allowed 55%+ shooting simply with:

o:FGP>=55

To get at the results when a team is off a game in which they allowed at least 55% shooting from the field, use:

po:FGP>=55

We’ll look more at using prefixes in combination in the section: [Mixing Prefixes](#).

The last prefix is the least commonly used, but it can uncover some very profitable situations nonetheless.

2.4 -- Team’s Next Game – n:

The “n” game reference points the parameter to the team’s next game. This is not a commonly used parameter, but it can be useful, for example, to see how a team does when they have a particular opponent up next. For example, to see how the Mavs perform before visiting the Spurs, use:

team=Mavs and no:team=Spurs and n:A

The next prefix can be useful to uncover results in the first of back-to-back road games. For example, to see how teams perform as in the first of back-to-back road games when they are laying at least 8 points, use:

line<=-8 and A and n:A and n:rest=0

It can also be used to see how a team performs, say, in the first game of at least a three game homestand. The following gives the results for the Kings in the first game of at least a three game homestand:

p:A and H and n:H and nn:H and team=Kings

To see how the league does in the last game of at least a three game road trip when they have at least three days rest upcoming, use:

pp:A and p:A and A and n:H and n:rest>=3

Other uses include: when a team is a home favorite with a revenge game on the road next. We'll investigate this and much more much more in the next section, which will investigate mixing game prefixes.

2.5 – Mixing Game References

Note that the prefixes can not only be repeats, they can be different as well. To investigate “opponent’s previous,” we just use the prefix “op.”

For example, to see how the Warriors perform vs a team that has lost their last three games, use:

team=Warriors and op:L and opp:L and oppp:L

To see how the Suns perform at home vs a team that has scored at least 100 points for three straight game, use:

team=Suns and H and op:points>=100 and opp:points>=100 and oppp:points>=100

To see how the Suns perform when their opponent allowed 100+ points for three straight, use:

team=Suns and opo:points>=100 and oppo:points>=0 and opppo:points>=100

The “opo” prefix indicates “opponent’s previous opponent” and the “oppo” prefix indicates opponent’s previous previous opponent.”

Or to see how the league does in Houston when they play in Dallas the next day, use:

o:team=Rockets and no:team=Mavericks and n:rest=0

The combination prefix “no” means the team’s next opponent.

To see how teams do in Dallas when they played in San Antonio the previous night, use:

o:team=Mavs and A and po:team=Spurs p:A and rest=0

To see how the Hornets do when they have a same-season revenge game tomorrow, use :

team=Hornets and nP:margin<0 and nP:season=season and n:rest=0

The “nP” combination of game prefixes refers the parameter to the previous match-up with the team’s next opponent.

To see how the Heat do when are facing a team that broke a three game losing streak against them in their previous match-up, use:

team=Heat and P:L and PP:W and PPP:W and PPPP:W

To see how the league performs when they are at home off two road games in which they allowed 50%+ shooting, use:

H and p:A and pp:A and po:FGP>=50 and ppo:FGP>=50

To see how the Sonics perform when they host a team off an overtime game, use:

op:overtime > 0 and team=Supersonics and site=home

To see how the Hornets perform when are on the road off a loss in which their opponent stole the ball at home a dozen times, use:

team=Hornets and po:steals>=12 and A and p:L

To see how the Wizards perform when they are seeking revenge for a loss in which they scored fewer than 20 points in the fourth quarter, use:

team=Wizards and P:P4<20 and P:L

Chapter Three – COMPARING PARAMETERS

Previously, parameters were assigned a value or a range of values. For example, p:turnovers>20 or p:FGP>50. However, the parameters themselves can be compared. For example, to see how the Spurs perform after a game in which they had more turnovers than assists, use:

team=Spurs and p:turnovers > p:assists

Numbers can be added or subtracted from the parameters as well. For example, to see how the Nets do after a game in which they were out rebounded by at least 10 rebounds, use:

team=Nets and p:rebounds +10 <= po:rebounds

The parameters can be divided and multiplied as well. For example, to see how the Lakers perform on the road after a game in which at least 75% of their baskets were assisted, use the following query text.

team=Lakers and p:assists*1.0 / p:field goals made>=0.75

To see how the Blazers when they are off a loss in which they missed at least ten free throws, use:

team = Blazers and p:L and p:free throws attempted – free throws made>=10

To see how the Blazers when they are off a loss in which the number of free throws that they missed was greater than the losing margin, use:

team = Blazers and p:L and p:free throws attempted – p:free throws made + p:points > po:points

To see how the Suns do when they are off a double-digit win in which they shot better from the three-point line than from the field, use:

team = Suns and p:margin>=10 and p:TPP>p:FGP

To see how the Cavs perform when they are off a loss in which they were outrebounded by at least 10 offensive rebounds, use:

team=Cavs and p:offensive rebounds +10<=po:offensive rebounds

To see how the Mavs perform when they are off a loss in which they had more turnovers than assists and shot less than 60% from the free throw line, use:

team=Mavs and p:turnovers>p:assists and p:L and p:FTP<60

To see how the league performs when they are off a game in which they out-rebounded their opponent by double digits at home, committed at least 27 turnovers, and lost, use:

p:turnovers>=27 and p:L and p:rebounds>=po:rebounds+10 and p:site=home

KillerCappers.com is ALWAYS looking for winning handicappers who use KillerSports.com as part of their handicapping routine.

If you find good trends and systems, let us know by sending them to feedback@KillerSports.com or by posting them at the SportsDataBase.com Google Group.

Chapter Five - DEVIATIONS FROM THE AVERAGE

5.1 – Season-to-Date Average

It is very useful to be able to query on a team's season-to-date average performance for a particular parameter. For example, a team's average number of blocks per game. The format here is simply:

$$tA(\text{blocks})$$

Where the letter t stands for team and the capital letter A represents the season-to-date average. No semi-colon is used. With this, we can query, for example, the league's performance when they are off a game in which they shot at least ten percentage points higher than their season-to-date average, thusly:

$$tA(\text{FGP}) + 10 < p:\text{FGP}$$

Similarly, we can investigate the league's performance when they allowed a shooting percentage that was at least 10 popints more than their season-to-date average. Like this:

$$tA(o:\text{FGP}) + 10 < po:\text{FGP}$$

Sometimes a team makes major adjustments after a game in which they had at least five more turnovers than their season-to-date average. This simply query is all that is needed:

$$tA(\text{turnovers}) + 10 < p:\text{turnovers}$$

What about when a team is facing an opponent that has average at least 4 more three point attempts per game, season-to-date? This query gets the job done:

$$tA(\text{TPA}) + 4 < o:\text{TPA}$$

5.2 Averaging Recent Games

Sometimes, it is useful to compare a team's recent performance over their last few games rather than their season-to-date average – especially in the NBA. Here, the long format must to used. That is, instead of the capital A, the entire word “Average” must be used. So, the following query gives the league's results when they averaged more than 100 points per game over their last seven games.

Average(points@team and season, N=7) > 100

Conditions can be added as well. For example, to see how the league when they've averaged more than 100 points per game over their last three HOME games, use:

Average(points@team and season and H, N=3) > 100

When a team averaged fewer than 20 assists per game in their last three road games:

Average(assists@team and season and A, N=3) < 20

The possibilities are virtually limitless.

5.3 Team's Season-to-Date Record

Another useful handicapping parameter is the current winning percentage of a team. Not surprisingly, good teams react differently than poor teams in many handicapping situations.

To query on a team's win-loss fraction for the current season, use:

tA(W)

To query on the opponent's win-loss fraction for the current season, use:

oA(W)

So, we now can access the situation, "when a team that is at least 600 on the season has lost three straight" with:

tA(W)>=0.600 and p:L and pp:L and ppp:L

Also, we can query on the situation: "when a team that is 0.600+ on the season is an underdog to a team that is 400 or less" with:

tA(W)>=0.600 and D and oA(W)<=0.400

In a similar fashion, we can get at the situation when a team a team is a home underdog to a team with a worse record.

tA(W) > oA(W) and HD

What about the situation when a team that is under 500 on the season is a 10+ point favorite? Simple.

tA(W) < 0.500 and line <= -10

What about the situation when a team that lost their last three games to drop to 500 for the season? All you need is this:

tA(W)=0.500 and p:L and pp:L and ppp:L

The team's exact number of wins and losses can be queried using the "Sum" command. For example to query on teams that are at least 10 games above 500 on the season, use:

Sum(W@team and season) - Sum(L@team and season) >= 5

What about an undefeated team that is at least 4-0? This is what you need:

Sum(W@team and season)>=4 and Sum(L@team and season)=0

What about the situation when a team that is under 500 for the season has won at least eight of their last ten games? All you need is this:

tA(W)<0.500 and Sum(W@team and season, N=10)>=8

Remember, check the Google Groups site to see all the questions users have and to post your own. Handicappers, both professional and otherwise that know how to use KillerSports.com will have a tremendous advantage over those who do not.

Chapter Six – THE SEARCH ALL FEATURE

Let's say we want to know who is the best team in the league in a particular situation. Let's start with a simple one – after a 20+ point loss in which they committed 20+ turnovers. The situation is simply:

p:margin<=-20 and p:turnovers>=20

To search all the teams simultaneously and have the computer rank them from most skewed to least skewed, simply add the team parameter, but do not set it to anything. That is, use the following query:

p:margin<=-20 and p:turnovers>=20 and team

The result will be a table that has the records of all 30 NBA teams in this situation, with the most interesting records at the top. To see the game listing for any team, simply click on the team's name.

This is a tremendous time-saver and it is one of the features that makes the Sports Data Query Language (SDQL) so powerful.

This easy-to-use feature will quickly become one of the most frequently used as well. For example, let's say you are interested in which teams have interesting results when they are off a game in which they are seeking revenge for a loss in which they shot less than 40% from the field. This is all you need:

P:L and P:FGP<40 and team

Also, if you want to see how a particular team has performed vs each division, use, for example:

team=Lakers and o:division

To see how a particular team has performed at every possible line, use, for example:

team=Bulls and line

To see how a particular team has performed vs every other team, use, for example:

team=Celtics and o:team

The possibilities are virtually limitless. We can perform similar searches on previous line, current line, free throw percentage, blocks, steals, points in the fourth quarter, et cetera, et cetera.

Chapter Seven – PLAYER-BASED TRENDS

The NBA has the fewest number of players on the floor of any major team sport. This makes each individual performance more important – especially the performance of the key players. KillerSports.com offers the ability to query on the performance of a particular player. So, instead of just seeing how the Lakers perform after a game in which they shot less than 40% from the field and committed 20+ turnovers, we can see, for example, how the Lakers do after a game in which Kobe Bryant shot less than 33% from the field and committed 5+ turnovers. The format is simply the team name, then a colon then the player's name and another colon. This sequence can be followed by ANY of the SDQL parameters. So, to see how the Lakers perform when Kobe Bryant scores 40+ points use:

Lakers:Kobe Bryant:points>=40

So, to see how the Lakers perform the game after Kobe Bryant scored 40+ points use:

Lakers:Kobe Bryant:p:points>=40

So, to see how the Lakers perform the game after Kobe Bryant scored 40+ points in each of their last two games use:

Lakers:Kobe Bryant:p:points>=40 and Lakers:Kobe Bryant:pp:points>=40

To see how the Lakers perform at home after an away loss in which Kobe Bryant scored 40+ points use:

H and p:AL and Lakers:Kobe Bryant:p:points>=40

To see how the Lakers perform at home after a loss in which Kobe Bryant shot less than 30% from the field, use:

Lakers:Kobe Bryant:p:field goal percentage<30

To see how the Raptors perform at home after a loss in which Chris Bosh committed at least five turnovers, use:

Raptors:Chris Bosh:p:turnovers>=5

To see how the Suns perform the game after Steve Nash had more turnovers than assists, use:

Suns:Steve Nash:p:turnovers> Suns:Steve Nash:p:assists

We can also tap into the revenge factor for individual players. To see, for example, how the Knicks perform when they are seeking revenge for a loss in which Stephon Marbury shot less than 33% from the field, use:

100*Knicks:Stephon Marbury:P:field goals made/ Knicks:Stephon Marbury:P:field goals attempted<33 and P:A

While the player-based feature is extremely powerful, there are some limitations. There are only five key players available for each team. unimportant bench players are not queryable.

In addition, the capitalized short cuts are not currently available with the player-based queries. That is FGP can't be used as a short cut for field goal percentage.

Finally, the "search-all" feature does not work with the player-based queries.

To see some of the trends that can result from such investigations, check out the KillerSports.com NBA trend issue. It contains 10 perfect trends in past performance for each of the 30 NBA teams. The query text for each trend is included as well. This issue is available at KillerSports.com.

Remember, sign up for membership in KillerSports.com and the Sportsdatabase.com Google Group. It's free and it will help you become a master of the Sports Data Query Language.