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Baseball/softball game XML description Version 1.3.1 (4/20/04)

The following is an overview of the structure for a baseball/softball game XML output:

```
<br/>
bsgame...>
 <venue...>
    <umpires...></umpires>
    <rules...></umpires>
    <notes...>
      <note...></note>
    </notes>
 </venue>
 <team . . >
    linescore...>neinn...></lineinn></linescore>
    <starters...><starter...></starter></starters>
    <totals>
      <hitting...></hitting>
      <fielding...></fielding>
      <pitching...></pitching>
      <hsi tsummary...></hsi tsummary>
      <psitsummary...></psitsummary>
    </totals>
    <player...>
      <hitting...></hitting>
      <fielding...></fielding>
      <pitching...></pitching>
      <hsi tuation...></hsi tutation>
      <psituation...></psituation>
      <fsituation...></fsituation>
    </player>
  </team>
 <pl><plays...>
    <i nni ng. . . >
      <br/>
batting...>
        <pl><play...>
          <narrative...></narrative>
          <sub. . . ></sub>
          <br/>
batter...></batter>
          <runner> . . . ></runner>
          <pitcher. . . ></pitcher>
          <fielder...></fielder>
        </play>
      </batting>
    </i nni ng>
 </plays>
  <status...></status>
</bsgame>
```

<bsgame>

The
bsgame> tag defines the start of a baseball/softball game dump.

<bsgame source="TAS Baseball/Softball" version="1.0" generated="0ct 09, 2000">

Attribute Description
source identifies the systemthat built the data output
version identifies the version of the bsgame specification used to build the data output
generated the date when the output was generated

Notes:

<venue>

The <venue> tag defines general attributes about the game: the game identifier, teams involved, date and location, and so on.

```
<venue gameid="2MAY20"
  visid="GMU" visname="George Mason" homeid="ECU" homename="East Carolina"
  date="May 20, 1994" location="Norfolk, Va." stadium="" duration="2:25"
  attend="1014" leaguegame="N" neutralgame="Y" start="3:30 pm" schedinn=9>
```

Attribute	Description
gameid	game id
visid	visiting team id
visname	visiting team name
homeid	home team id
homename	home team name
date	date game was played
location	site where game was played
stadium	stadium where game was played
duration	game duration (in hh:mm)
attend	game attendance
leaguegame	"Y" indicates a league/conference game
neutralgame	"Y" indicates a neutral site game
start	start time of the game
dhgame	"1" indicates 1st game of a doubleheader, "2" indicates 2nd game
series	game series identifier
schedinn	number of regulation innings the game was scheduled for
schednote	flag character that can be used to flag entries in a game results list

<umpires>

The <umpires> tag contains the names of the officials in the game.

```
<umpires hp="Raynor" 1b="Mileur" 3b="Chambers"></umpires>
```

Attribute	Description
hp	name of home plate umpire
first	name of first base umpire
second	name of second base umpire
third	name of third base umpire
If	name of left field line umpire
rf	name of right field line umpire

Notes:

<rules>

The <rules> defines specific rules that apply to this game. Attributes of the <rules> tag are:

```
<rules batters="9,9" usedh="Y"></rules>
```

Attribute Description

batters number of batters in the lineup for the visiting, home teams

usedh "Y" indicates the DH rule is in effect

Notes:

<notes>

The <notes> tag may contain any number of <note> tags. Attributes of <note> tags are:

```
<notes>
    <note text="Line 1 of game notes"></note>
    <note text="Line 2 of game notes"></note>
</notes>
```

Attribute Description

text narrative text of the game note

<team>

The <team> defines information about a team. The following linescore>, <starters>, lineups>, <totals> and <player> tags are applied to this team.

```
<team vh="V" code="GMU" id="GMU" name="George Mason" neutral game="Y" record="18-32-1">
```

Attribute	Description
vh	"V" indicates the visiting team, "H" indicates the home team
code	external team code (may be different than the team id)
id	team id
name	team name
treatas	if present, forces the team to be considered "V" or "H" for W-L recored purposes
record	overall W-L record after this game (for example, "55-38")
conf	identifier of league or conference (if league/conference game)
confrecord	league/conference W-L record after this game (if league/conference game)

Notes: The "treatas" field is generally used when the host team is batting as the visitors for a game, but still need to be considered the "home" team for won-loss record purposes. In this case, enter treatas="H" for the host team batting as the visitors, and treatas="V" for the home batting team.

linescore>

The linescore> tag contains the line score summary for a team in the game.

Attribute Description score-by-inning for the team (each inning separated by a comma) line runs total runs scored total hits hits total errors committed errs lob total runners left on base inning number inn number of runs scored in the inning (or "X" for home team not batting in bottom of last inning) score

Notes: An "X" in the line field is used for the last half-inning when the home team does not bat.

<starters>

The <starters> tag contains the starting lineups for a team in the game.

```
<starters>
  <starter spot="1" name="Parr" uni="23" pos="2b"></starter>
  <starter spot="2" name="Hammond" uni="11" pos="ss"></starter>
  <starter spot="3" name="Robinson" uni="4" pos="3b"></starter>
  <starter spot="4" name="Matan" uni="24" pos="rf"></starter>
  <starter spot="5" name="Haywood" uni="44" pos="dh"></starter>
  <starter spot="6" name="Haywood" uni="44" pos="dh"></starter>
  <starter spot="6" name="J. Hill" uni="7" pos="1b"></starter>
  <starter spot="7" name="Southerland" uni="35" pos="c"></starter>
  <starter spot="8" name="Diaco" uni="2" pos="cf"></starter>
  <starter spot="9" name="Shanks" uni="6" pos="lf"></starter>
  <starter spot="10" name="McKay" uni="14" pos="p"></starter>
  </starter>
</starters></starter>></starter>></starter></starter>></starters></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></starter></tarter>
```

Attribute Description spot spot in the lineup name player name

uni player uniform number pos defensive position

Notes:

<base>

The <bar>
tag contains the current batting order for a team in the game.

Attribute Description spot spot in the lineup name player name uni player uniform number

pos defensive position

Notes:

<totals>

The <totals> tag begins a summary of <hitting>, <fielding>, and <pitching> statistics for the team in this game. These tags are described later in this document.

<totals>

Attribute Description

[None]

Notes:

<player>

The <player> tag defines a player on the current team. The <player> tag also begins a summary of <hitting>, <fielding> and <pitching> statistics in the game for the player.

Attribute Description
name name of player
code player code
uni uniform number

checkname last, first for verification (optional)

gp games playedgs games started

spot lineup spot for this player

sub if not game starter, indicates sequence of substitutes for the lineup spot

pos position(s) played

bats R=right, L=left, B=both (switch hitter)

throws R=right, L=left

class FR=freshman, SO=sophomore, JR=junior, SR=senior

<hitting>

The htting tag contains a summary of hitting statistics for the game and can appear within team <totals> or for an individual player>.

```
<hitting ab=29 r=4 h=10 rbi=3 2b=4 bb=3 so=3 hbp=1 kl=2 sb=5 cs=1 sh=3 gdp=2 hitdp=3> <hitting ab=3 r=0 h=2 rbi=2 sf=1>
```

Attribute	Description
ab	at bats
r	runs scored
h	hits
rbi	runs batted in
double	doubles
triple	triples
hr	home runs
bb	walks (includes intentional walks)
ibb	intentional walks
so	strikeouts (includes strikeouts looking)
kl	strikeouts looking
hbp	hit by pitch
sb	stolen bases
cs	caught stealing
sh	sacrifice hits
sf	sacrifice flies
rchci	reached on catchers interference
rcherr	reached on an error
rchfc	reaches on a fielders choice
ground	ground outs
fly	fly outs
gdp	grounded into double play
pickoff	picked off
hitdp	total number of double plays (of any kind)
fly	number of fly outs
ground	number of ground outs

Notes: All numeric fields default to '0' if not included in the output.

<hsituation>

The <hsituation> tag defines hitting statistics for a <player> in a particular game context. Attributes include:

```
<hsituation context="bypos" pos="rf" ab="2" r="2" h="1" rbi="3" hr="1" bb="1"></hsituation>
```

Attribute	Description
context	hypos hyspot vsleft vsright leadoff runners scorenos runners2 scorenos2 empty loaded vspitcher

pos indicates defensive position for context=bypos
spot indicates spot in batting order for context=byspot
pitcher name of the pitcher for context=vspitcher

Notes:

<fielding>

The <fielding> tag contains a summary of fielding statistics for the game and can appear within team <totals> or for an individual <player>.

```
<\!fi\,el\,di\,ng\;\;po=\!24\;\;a=\!17\;\;e=\!1\;\;sba=\!10\;\;csb=\!2\;\;i\,ndp=\!8\!> <\!fi\,el\,di\,ng\;\;po=\!2\;\;a=\!6\;\;e=\!0\;\;i\,ndp=\!1\!>
```

Attribute	Description
ро	putouts
а	assists
е	errors
pb	passed balls
ci	catchers interference
sba	stolen bases against
csb	caught stealing by
indp	involved in double-plays
intp	involved in triple-plays

Notes: All numeric fields default to '0' if not included in the output.

<fsituation>

The <fsituation> tag defines fielding statistics for a <player> in a particular game context. Attributes include:

```
<fsituation context="bypos" pos="ss" po="2" a="2" e="1"></fsituation>
```

Attribute	Description
context	bypos
pos	defensive position stats apply to for context=bypos

Notes: The <fsituation> is currently an undocumented feature.

<pitching>

The <pitching> tag contains a summary of pitching statistics for the game and can appear within team <totals> or for an individual <player>.

Attribute	Description
appear	* order of appearance within game
win	* pitcher won-loss record if credited with the win
save	* pitcher season save number if credited with a save
loss	* pitcher won-loss record if charged with the loss
gs	* games started
cg	* complete games
sho	shutouts
cbo	* credit for combined shutout
ip	innings pitched
h	hits allowed
r	runs allowed
er	earned runs allowed
bb	walks allowed (includes intentional walks)
k	strikeouts (includes strikeouts looking)
bf	batters faced
ab	opponent at bats
double	doubles allowed
triple	triples allowed
hr	home runs allowed
wp	wild pitches
bk	balks
hbp	hit batters
kl	strikeouts looking
ibb	intentional walks
inheritr	inherited runners
inherits	inherited runners that scored
sfa	sacrifice hits allowed
sha	sacrifice flies allowed
cia	catchers interference allowed
pitches	number of pitches
fly	number of fly outs
ground	number of ground outs
teamue	number of team unearned runs (in team totals block)

Notes: All numeric fields default to '0' if not included in the output. An asterisk (*) indicates this field is not used in the team <totals> context.

<psituation>

The <psituation> tag defines pitching statistics for a <player> in a particular game context. Attributes include:

Attribute	Description
context	by inn, vs left, vs right, lead off, runners, scorepos, runners2, scorepos2, empty, loaded
inn	inning number for context=byinn

<hsitsummary>

The <hsitsummary> tag defines a summary of hitting situation statistics a <player> or for a <team> in a. Attributes include:

```
 < hsitsummary \ rcherr="6" \ ground="8" \ fly="11" \ w2outs="3,15" \ wrunners="4,15" \ wrbiops="3,11" \ vsleft="6,39" \ leadoff="3,10" \ rbi \ 3rd="1,2" \ advops="8,16" \ adv="3" \ lob="7" \ rbi \ -2out="1"></hsitsummary> \ rbi
```

Attribute	Description
rcherr	times reached base on an error
rchfc	times reached base on a fielders choice
rchci	times reached base on catchers interference
ground	times grouded out
fly	times flied out (includes pop, line outs)
w2outs	hits-ab with 2-outs
wrunners	hits-ab with runners on base
wrbiops	hits-ab with runners in scoring position
vsleft	hits-ab vs left-handed pitchers
vsright	hits-ab vs right-handed pitchers
leadoff	success-opportunites as leadoff batter in inning
rbi3rd	success-opportunities to drive in a runner from 3rd with less than 2 outs
advops	number of runners advanced-ab
adv	number of times advanced at least 1 runner with an out
lob	runners left on base
rbi-2out	2-out RBIs

<psitsummary>

The <psitsummary> tag defines a summary of pitching situation statistics a <player> or for a <team> in a. Attributes include:

```
<psitsummary fly="4" ground="13" leadoff="7, 10" wrunners="3, 19" vsleft="3, 12" w2outs="0, 5" pitches="7" strikes="0"></psitsummary>
```

Attribute	Description
fly	fly outs allowed (includes pop, line outs)
ground	ground outs allowed
leadoff	success-opportunites against leadoff batters
wrunners	hits-ab with runners on base
vsleft	hits-ab vs left-handed batters
vsright	hits-ab vs right-handed batters
w2outs	hits-ab with 2-outs
pitches	number of pitches
strikes	number of strikes

<plays>

The <plays> tag indicates the beginning of the play-by-play section. The <play> tags that follow are organized under <inning> and <batting> tags to indicate which inning and which team was batting for each play.

<plays format="summary">

Attribute Description

format indicates the format of the play data that follows; currently only "summary"is supported

Notes:

<inning>

The <inning> tag defines the start of an inning.

<inning number=1>

Attribute Description number inning number

Notes:

<bar>
datting>

The <batting> tag defines the beginning of one half of an inning, and defines which team is batting.

<batting vh="V" id="GMU">

Attribute Description

vh "V" indicates the visiting team is batting; "H" indicates the home team is batting

id team id of the batting team

<play>

The <play> tag defines the game context for a play: how many outs, the current pitcher and batter, and any runners that are on base for this specific play. Additional tags are included within the <play> framework to describe actions and statistics on the play.

Attribute Description 1-up sequence, incremented for each play in the game sea number of outs at the start of the play outs name of the current batter batter batprof "L" indicates batter is batting left-handed, "R" indicates right-handed name of the current pitcher pitcher "L" indicates a left-ha pchprof first name of the runner on 1st base (if any) name of the runner on 2nd base (if any) second third name of the runner on 3rd base (if any)

Notes: The number of outs, the batter and pitcher profiles, and the runners on base attributes can be used to determine "situational" statistics for the <batter>, <pitcher>, and <runner> tags that follow.

<status>

Attribute

Description

The <status> tag contains the current status (context) of the game. This is primarily for live play-by-play presentation of the game.

```
<status complete="N" endinn="N" batting="GMU" outs="0"
    pitcher="Beck" batter="Frulio" first="Pullen" third="Rookwood"
    b="2" s="1" np="14"></status>
```

Allibule	Description
complete	"Y" indicates the game is complete
endinn	"Y" indicates the game is between innings
batting	team-id of team that is batting
inning	current inning
pitcher	current pitcher
batter	current batter
first	runner on first (if any)
second	runner on second (if any)
third	runner on third (if any)
b	number of balls in the count
s	number of strikes in the count
np	number of pitches by the current pitcher

Notes:

<narrative>

The <narrative> tag contains the narrative text of the play. This is primarily for information and clarity purposes only -- to provide some context around the play data that follows.

```
<narrative text="Yerys singled to right field, RBI; Head advanced to third; Borel scored"></narrative>
```

Attribute Description

text the narrative text of the play

Notes:

$\langle sub \rangle$

The <sub> tag defines a lineup change or substitution that occured.

```
<narrative text="Roth to p for Lavender"></narrative>
<sub vh="V" spot=10 who="Roth" for="Lavender" pos="p"></sub>
```

Attribute Description

vh "V" indicates a change for the visiting team, "H" indicates a change for the home team spot lineup spot where the change occurred (for example, 1 for leadoff, 10 for defense-only spot)

who name of player coming in or changing fielding position

name of player replaced; this field is not included for defensive position changes only for

position assumed by the player in the "who" field pos

Notes:

<bar>
datter>

The <batter> tag defines what the batter did on this play. If nothing happened to the batter, the <batter> tag is not present.

<batter name="Yerys" action="1B 9 RBI" out=0 adv=1 tobase=1 ab=1 h=1 rbi=1</batter>

Attribute	Description
name	name of the batter
action	actual scoring notation used by the scorekeeper (for example, "4-3")
out	1 indicates the batter was put out on this play
adv	number of bases advanced by the batter
tobase	base where batter ended up on this play
ab	at bats
h	hits
rbi	runs batted in
double	doubles
triple	triples
hr	home runs
bb	walks (includes intentional walks)
ibb	intentional walks
k	strikeouts (includes strikeouts looking)
kl	strikeouts looking
hbp	hit by pitch
sh	sacrifice hits
sf	sacrifice flies
rchci	reached on catchers interference
rcherr	reached on an error
rchfc	reached on a fielders choice
gndout	groud outs
flyout	fly outs
gdp	grounded into double play
dp	result was any kind of double play
tp	result was any kind of triple play
scored	1 indicates batter scored on this play
ue	1 indicates run was unearned
tu	1 indicates run was team unearned
por	name of pitcher of record for the run that was scored
sb	* stolen bases
cs	* caught stealing

pickoff * picked off

Notes: All numeric fields default to '0' if not included in the output. Fields flagged with an asterisk (*) should not be present for the batter, but are allowed to cater for unforseen circumstances.

<runner>

The <runner> tag defines what happened to a runner on this play. There can be up to 3 <runner> tags on each play to describe what happened to each runner on base. If nothing happens to a runner on the play, a <runner> tag is not included for that runner.

<runner base=3 name="Borel" action="+" out=0 adv=1 tobase=4 scored=1 por="Lavender"</pre>

Attribute	Description
base	indicates base runner was on at start of the play
name	name of the runner
action	actual scoring notation used by the scorekeeper (for example, "SB" or "+")
out	1 indicates the batter was put out on this play
adv	number of bases advanced by the runner
tobase	base where batter ended up on the play
scored	1 indicates runner scored on this play
ue	1 indicates run was unearned
tu	1 indicates run was team unearned
por	name of pitcher of record for the run that was scored
sb	stolen bases
cs	caught stealing
pickoff	picked off

Notes: All numeric fields default to '0' if not included in the output.

<fielder>

The <fielder> tag defines defensive statistics on this play. There can be any number of <fielder> tags on each play, each describing statistics for a single player.

```
<narrative text="KBillingsley grounded into double play 2b to ss to 1b; Yerys out on the
play"></narrative>
<fielder pos="1b" name="Pennell" po=1 indp=1></fielder>
<fielder pos="2b" name="Rookwood" a=1 indp=1></fielder>
<fielder pos="ss" name="Crawford" po=1 a=1 indp=1></fielder>
```

Attribute	Description
pos	defensive position
name	name of the player
ро	putouts
а	assists
е	errors
sba	stolen bases against
csb	caught stealing by
pb	passed balls
ci	catchers interference
indp	involvedin double play
intp	involved in triple play

<pitcher>

The <pitcher> tag defines statistics for the pitcher(s) on this play. A <pitcher> tag is included for the current pitcher, and for prior pitchers when they are the pitcher-of-record for a run that is scored on this play. The following is an example of output after Lavender came on to relieve Roth with 2 runners on base, and allowed a home run. The additional <pitcher> entry is included for Roth since he is the pitcher-of-record for the runners inherited by Lavender.

```
<pitcher name="Lavender" bf=1 ab=1 h=1 hr=1 rbi=3 r=1 er=1></pitcher> <pitcher name="Roth" r=2 er=1></pitcher>
```

Attribute	Description
name	name of the pitcher
bf	batters faced
ip	innings pitched (in thirds of an inning)
ab	opponent at bats
h	hits allowed
r	runs allowed
er	earned runs allowed
bb	walks allowed (included intentional walks)
ibb	intentional walks allowed
k	batters struck out (includes strikeouts looking)
kl	batters struck out looking
hbp	batter hit by pitch
wp	wild pitches
bk	balks
double	doubles allowed
triple	triples allowed
hr	home runs allowed
gndout	ground outs
flyout	fly outs
pickoff	runners picked off
gdp	grounded into double plays
sha	sacrifice hits allowed
sfa	sacrifice flies allowed
cia	catchers interference against
sba	stolen bases against
csb	caught stealing by

Notes: All numeric fields default to '0' if not included in the output.

Change history

Version 1.0.2:

- Enclose all attribute values in quotes (including integer values), for example, ab="4"
- In <umpires> tag change attrtibute names "1b" to "first", "2b" to "second", and "3b" to "third"
- In all statistics tags change attribute names "2b" to "double" and "3b" to "triple"; this change affects <batter>, <pitcher>, <hitting>, and <pitching> tags
- In <play> tag change attribute names "1st" to "first", "2nd" to "second" and "3rd" to "third"
- In <pitching> tag change attribute names "inherit-r" to "inheritr" and "inherit-s" to "inherits"

Version 1.1.0:

- Change <battering> statistics to <hitting> statistics
- Change "2out-rbi" to "rbi-2out"
- Add <plays> to support <narrative> and <innsummary> tags

Version 1.1.1:

- Add "sfa" attribute to <pitching> tag
- Add "sha" attribute to <pitching> tag
- Add "cia" attribute to <pitching> tag
- Add "pitches" attribute to <pitching> tag
- Initial description of , and tags

Version 1.2.0:

- Add lineinn> tag to specify score-by-inning as discrete values
- Add <status> tag to specify game context information

Version 1.3.0:

- Use extended name in "name" attribute of <player> tag to hold 20-character name
- Add "shortname" attribute to the <player> tag to hold 12-character name
- · Add "atpos" attribute to the <player> tag to indicate position player is current at
- Add "inning" attribute to the <status> tag
- List all players on roster with <player> tags (not just those that have played)
- Add <starters> block to list game starters
- Add <batords> block to list current batting orders
- Add <hsitsummary> and <psitsummary> tags

Version 1.3.1:

- Fix to value for "er" attribute in team <totals> tag to reflect team unearned runs
- Add "teamue" attribute to team <totals> tag for team unearned runs
- Add "fly" and "ground" attributes to <pitching>, <psituation>, <hitting> and <hsituation> tags