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5 Replies [Latest reply](https://community.oracle.com/message/10045165?tstart=0#10045165): Dec 20, 2011 12:06 AM by **Billy~Verreynne** [RSS](https://community.oracle.com/community/feeds/messages?thread=2325680)

[DIFFERENCE BETWEEN STRONG AND WEEK CURSORS IN ORACLE](https://community.oracle.com/message/10045039" \l "10045039)

This question has been **Answered.**

[[831674](https://community.oracle.com/people/831674?customTheme=otn)Newbie](https://community.oracle.com/people/831674?customTheme=otn)

[**831674**](https://community.oracle.com/people/831674?customTheme=otn) Dec 19, 2011 11:08 PM

Hi All ,  
  
Can any one please tell me ..what is ref cursor.in which case we need to use ref cursor .and what is difference between strong and week ref cursor.  
  
Thanks in Advance,  
Sanjeev.

[prakash](https://community.oracle.com/people/prakash?customTheme=otn)

**Correct Answer**by [prakash](https://community.oracle.com/people/prakash?customTheme=otn) on Dec 19, 2011 11:14 PM

hi,

What is Ref Cursor :

---------------------------------------------------------------------------------------

-->It is aslo a user defined type

-->ref cursor allows you to declare the  cursor variable those are independent of select statement

i .e

   the cursor variable declared using ref cursor type is ready to accept any select statement dynamically at the time of opening

-->Ref cursor are of two types

  1) A Strong ref cursor(also called static structure type)

2)Weak ref cursor(also  called dynamic structure type )

1)Strong ref cursor:

-->When return type included then it is called strong or static structure type

-->static ref cursor support different  type of select statement but all of same strucure ,but not neccessary that the table should be same

2)Weak Ref  Cursor:

  this ref cursor allows us to any  type of select statement irrespective of data structure . i .e any table

Ref Cursor:

Syntax:

  type <typename> is ref cursor [return <returntype>];

syntax for open statement:

  open <cursorvariable> for select statement .......;

Strong cursor example 

--------Strong cursor ----------------------

declare

type emprefcur is ref cursor return emp%rowtype;

ec emprefcur;

v\_ec ec%rowtype;

begin

  open ec for select \* from emp;

loop

      fetch ec into v\_ec;

     exit when ec%notfound;

     print(v\_Ec.empno);

     print(v\_ec.ename);

end loop;

close ec;

print('-------------------------------------------------------------------------'):

  open ec for select \* from emp;

loop

      fetch ec into v\_ec;

     exit when ec%notfound;

     print(v\_Ec.empno);

     print(v\_ec.ename);

end loop;

close ec;

end;

Weak cursor example   
-------------

declare

------------------weak cursor --------------------------

type refcur is ref cursor;

xc refcur;

v\_Ec emp%rowtype;

v\_dc dept%rowtype;

begin

  open xc for select \* from emp;

loop

     fetch xc into v\_ec;

exit when xc%notfound;

  print(v\_ec.ename);

  print(v\_Ec.empno);

end loop;

close xc;

print('--------------------------------------');

open xc for select \* from dept;

loop

     fetch xc into v\_dc;

     exit  when xc%notfound;

  print(v\_dc.deptno);

  print(v\_dc.dname);

  print(v\_dc.loc);

end loop;

close xc;

end;

Thanks,  
P Prakash  
  
Edited by: prakash on Dec 19, 2011 9:14 PM

[**See the answer in context**](https://community.oracle.com/thread/2325680#10045048)

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* **Correct Answer**[1.](https://community.oracle.com/message/10045048#10045048)[Re: DIFFERENCE BETWEEN STRONG AND WEEK CURSORS IN ORACLE](https://community.oracle.com/message/10045048#10045048)

[[prakash](https://community.oracle.com/people/prakash?customTheme=otn)Expert](https://community.oracle.com/people/prakash?customTheme=otn)

[**prakash**](https://community.oracle.com/people/prakash?customTheme=otn)Dec 19, 2011 11:14 PM ([in response to **831674**](https://community.oracle.com/message/10045039#10045039))

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     print(v\_ec.ename);

end loop;

close ec;

print('-------------------------------------------------------------------------'):

  open ec for select \* from emp;

loop

      fetch ec into v\_ec;

     exit when ec%notfound;

     print(v\_Ec.empno);

     print(v\_ec.ename);

end loop;

close ec;

end;

Weak cursor example   
-------------

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------------------weak cursor --------------------------

type refcur is ref cursor;

xc refcur;

v\_Ec emp%rowtype;

v\_dc dept%rowtype;

begin

  open xc for select \* from emp;

loop

     fetch xc into v\_ec;

exit when xc%notfound;

  print(v\_ec.ename);

  print(v\_Ec.empno);

end loop;

close xc;

print('--------------------------------------');

open xc for select \* from dept;

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     exit  when xc%notfound;

  print(v\_dc.deptno);

  print(v\_dc.dname);

  print(v\_dc.loc);

end loop;

close xc;

end;

Thanks,  
P Prakash  
  
Edited by: prakash on Dec 19, 2011 9:14 PM

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* [2.](https://community.oracle.com/message/10045061" \l "10045061" \o "Link to reply #2)[Re: DIFFERENCE BETWEEN STRONG AND WEEK CURSORS IN ORACLE](https://community.oracle.com/message/10045061#10045061)

[[831674](https://community.oracle.com/people/831674?customTheme=otn)Newbie](https://community.oracle.com/people/831674?customTheme=otn)

[**831674**](https://community.oracle.com/people/831674?customTheme=otn)Dec 19, 2011 11:19 PM ([in response to **prakash**](https://community.oracle.com/message/10045048#10045048))

Hi Prakash ..Thanks alot for your indetail explanation.

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* [3.](https://community.oracle.com/message/10045091" \l "10045091" \o "Link to reply #3)[Re: DIFFERENCE BETWEEN STRONG AND WEEK CURSORS IN ORACLE](https://community.oracle.com/message/10045091#10045091)

[[prakash](https://community.oracle.com/people/prakash?customTheme=otn)Expert](https://community.oracle.com/people/prakash?customTheme=otn)

[**prakash**](https://community.oracle.com/people/prakash?customTheme=otn)Dec 19, 2011 11:34 PM ([in response to **831674**](https://community.oracle.com/message/10045061#10045061))

if you think your question is answered then mark it as answered or correct .  
  
Thanks,  
P Prakash

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[**€$ħ₪**](https://community.oracle.com/people/%E2%82%AC%24%C4%A7%E2%82%AA?customTheme=otn)Dec 19, 2011 11:46 PM ([in response to **prakash**](https://community.oracle.com/message/10045091#10045091))

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[[Billy~Verreynne](https://community.oracle.com/people/Billy~Verreynne?customTheme=otn)Titan](https://community.oracle.com/people/Billy~Verreynne?customTheme=otn)

[**Billy~Verreynne**](https://community.oracle.com/people/Billy~Verreynne?customTheme=otn)Dec 20, 2011 12:06 AM ([in response to **831674**](https://community.oracle.com/message/10045039#10045039))

user13483989 wrote:  
  
Can any one please tell me ..what is ref cursor.in which case we need to use ref cursor .and what is difference between strong and week ref cursor.

All SQL are parsed and executed as cursors. A cursor in the shared pool is.. a cursor in the shared pool. In other words, there are no concepts such as ref cursors or weak and strong cursors in this respect. All SQL cursors are the same.  
  
The difference is on the client side of the cursor - on the side of the caller that requested the SQL to be parsed into a cursor and now wants to use that SQL cursor.  
  
Clients typically have a number of different ways to interact with the SQL cursor. In PL/SQL alone, this interaction can be via:  
- implicit cursors  
- explicit cursors  
- DBMS\_SQL cursors  
- ref cursors  
- execute dynamic cursors  
  
Each of these cursor interfaces provide different features for the client. But on the backend - there is a single type of SQL cursor. And the server does not know and does not care what interface on the client you use to interact with its SQL cursor in the database shared pool.  
  
It is important to understand this concept - and then to select the most appropriate client cursor interface in your code.  
  
So from an Oracle perspective - there is no such thing as a weak cursor and a strong cursor. That is a client concept (and in particular, with the PL/SQL language and its ref cursor interface to SQL cursors).  
  
So you should be answering this question of yours by reading that fine manual. [Ref Cursors](http://docs.oracle.com/cd/E11882_01/appdev.112/e25519/static.htm#sthref604) are described in *Oracle® Database PL/SQL Language Reference*guide.  
  
The guide states:  
+"If you specify return\_type, then the REF CURSOR type and cursor variables of that type are strong; if not, they are weak. SYS\_REFCURSOR and cursor variables of that type are weak."+  
  
To understand what this means, you need to understand what the ref cursor client interface is, how it works, and when to use it. Refer to the forum FAQ posting {message:id=3403497}.

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