

**NAME**

`SPI_cursor_open` - set up a cursor using a statement created with **SPI\_prepare**

**SYNOPSIS**

```
Portal SPI_cursor_open(const char * name, SPIPlanPtr plan,
                       Datum * values, const char * nulls,
                       bool read_only)
```

**DESCRIPTION**

**SPI\_cursor\_open** sets up a cursor (internally, a portal) that will execute a statement prepared by **SPI\_prepare**. The parameters have the same meanings as the corresponding parameters to **SPI\_execute\_plan**.

Using a cursor instead of executing the statement directly has two benefits. First, the result rows can be retrieved a few at a time, avoiding memory overrun for queries that return many rows. Second, a portal can outlive the current C function (it can, in fact, live to the end of the current transaction). Returning the portal name to the C function's caller provides a way of returning a row set as result.

The passed-in parameter data will be copied into the cursor's portal, so it can be freed while the cursor still exists.

**ARGUMENTS**

const char \* *name*

name for portal, or NULL to let the system select a name

SPIPlanPtr *plan*

prepared statement (returned by **SPI\_prepare**)

Datum \* *values*

An array of actual parameter values. Must have same length as the statement's number of arguments.

const char \* *nulls*

An array describing which parameters are null. Must have same length as the statement's number of arguments.

If *nulls* is NULL then **SPI\_cursor\_open** assumes that no parameters are null. Otherwise, each entry of the *nulls* array should be ' ' if the corresponding parameter value is non-null, or 'n' if the corresponding parameter value is null. (In the latter case, the actual value in the corresponding *values* entry doesn't matter.) Note that *nulls* is not a text string, just an array: it does not need a

'\0' terminator.

bool *read\_only*

true for read-only execution

### **RETURN VALUE**

Pointer to portal containing the cursor. Note there is no error return convention; any error will be reported via **eelog**.