NAME

PEXGetAncestors - Get Ancestors

SYNTAX

PEXStructurePath ∗PEXGetAncestors(Display ∗*display*, PEXStructure *structure*, int *path_part*, unsigned long *path_depth*, unsigned long ∗*count_return*)

PARAMETERS

display	A pointer to a display structure returned by a successful **XOpenDisplay** call.
structure	The resource identifier of the structure.
path_part	The part of the path to return (**PEXTopPart** or **PEXBottomPart**).
path_depth	The maximum number of structure network path levels to be returned in each path found.
count_return	Returns the number of paths found.

RETURNS

An array of structure paths defining the ancestors of the specified *structure;* a null pointer if unsuccessful.

DESCRIPTION

This function returns a list of structure network paths which reference the specified *structure.* Paths are returned as lists of element references, each of which is represented as a structure resource identifier and an offset that gives the element's position in the *structure.* Only unique paths are returned; in other words there will be no duplicates in the list of returned paths.

The path part must be either **PEXTopPart,** which requests that the top of the structure paths be returned, or **PEXBottomPart,** which requests that the bottom of the structure paths be returned.

The path depth specifies the maximum number of element references to be returned in each path. If the path depth is 0, the entire path is returned. If the path depth is 1, only one element reference is returned for each path. A path depth of 2 returns two elements, and so on.

Specifying a path depth of 0 and a path part of **PEXTopPart** returns the unique top parts of all paths to structure. Specifying a path depth of 1 and a path part of **PEXTopPart** returns the root structure of all structure networks which contain *structure.* A path depth of 2 and path part of **PEXBottomPart** returns all of the structure's immediate ancestors. Determine the number of references to *structure* by setting the path depth to 1 and the path part to **PEXBottomPart.**

PEXlib allocates memory for the returned ancestor information. **PEXFreeStructurePaths**(3) should be called to deallocate the memory.

DATA STRUCTURES

```
typedef  XID      PEXStructure;

typedef struct {
        unsigned long           count;          /* number of elements */
        PEXElementRef           *elements;
} PEXStructurePath;
```

```
typedef struct {
        PEXStructure        structure;
        unsigned long       offset;
} PEXElementRef;
```

ERRORS

BadPEXStructure
The specified *structure* resource identifier is invalid.

BadValue
The specified value for path part is invalid.

SEE ALSO

PEXCreateStructure(3)
PEXGetStructuresInNetwork(3)
PEXGetDescendants(3)