NAME

PEXGetDescendants - Get Descendants

SYNTAX

PEXStructurePath *PEXGetDescendants(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.

DESCRIPTION

This function returns a list of structure network paths referenced by the specified *structure.* The elements of the returned array are of type **PEXStructurePath.** 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 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, and so on.

For instance, specifying a path depth of 0 and a path part of **PEXTopPart** returns all paths from structure to leaf nodes in the *structure* network tree in the order they would be traversed. Specifying a path depth of 1 and a path part of **PEXBottomPart** determines the bottom-most structures of the structure network rooted at *structure.*

PEXlib allocates memory for the returned descendant 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)
PEXGetAncestors(3)