NAME

PEXInitialize - Initialize PEXlib display connection

SYNTAX

int PEXInitialize(Display **display*, PEXExtensionInfo ***info_return*, int *length*, char **error_string*)

PARAMETERS

display A pointer to a display structure returned by a successful **XOpenDisplay** call.

info_return Returns a pointer to the extension information; if available (see the Description).

length The length, in bytes, of the memory allocated for the error string.

error_string A pointer to memory allocated for the error string.

RETURNS

Zero if successful; otherwise, one of the following return values:

PEXBadExtension
PEXBadProtocolVersion
PEXBadFloatConversion
PEXBadLocalAlloc

DESCRIPTION

PEXInitialize initializes PEXlib for the specified display.

PEXInitialize can be called multiple times; subsequent calls will result in the same return value as the first call.

Standard **PEXInitialize** failure return values are:

PEXBadExtension - the PEX server extension does not exist,

PEXBadProtocolVersion - the PEX server extension does not support a compatible protocol version,

PEXBadFloatConversion - the PEX server extension does not support a protocol floating point format compatible with PEXlib's native format or a format to which PEXlib supports conversion, or

PEXBadLocalAlloc - PEXlib client-side allocation failed.

If **PEXInitialize** is successful (return value is zero), or if the return value is **PEXBadProtocolVersion,** a pointer to the extension information is returned in *info_return.* Otherwise, a NULL pointer is returned in *info_return. The* extension information is private to PEXlib and must not be modified or freed by the application.

The error string parameter specifies an address to memory allocated by the application. The constant **PEXErrorStringLength** is defined as a guideline for the size to allocate for the error string. If no failure occurred, the memory addressed by the error string parameter will be unchanged. If a failure does occur, an error string giving further information about the failure will be copied into this memory (up to the maximum specified by the length parameter).

The actual string returned is implementation dependent, and is provided primarily for convenience in printing an error message for the application’s end-user.

DATA STRUCTURES

```
typedef struct {
        unsigned short      major_version;
        unsigned short      minor_version;
        unsigned long       release;
        unsigned long       subset_info;
        char                *vendor_name;
        int                 major_opcode;
        int                 first_event;
        int                 first_error;
} PEXExtensionInfo;
```

ERRORS

None

SEE ALSO

PEXGetExtensionInfo(3)
PEXGetEnumTypeInfo(3)
PEXGetImpDepConstants(3)
PEXMatchRenderingTargets(3)